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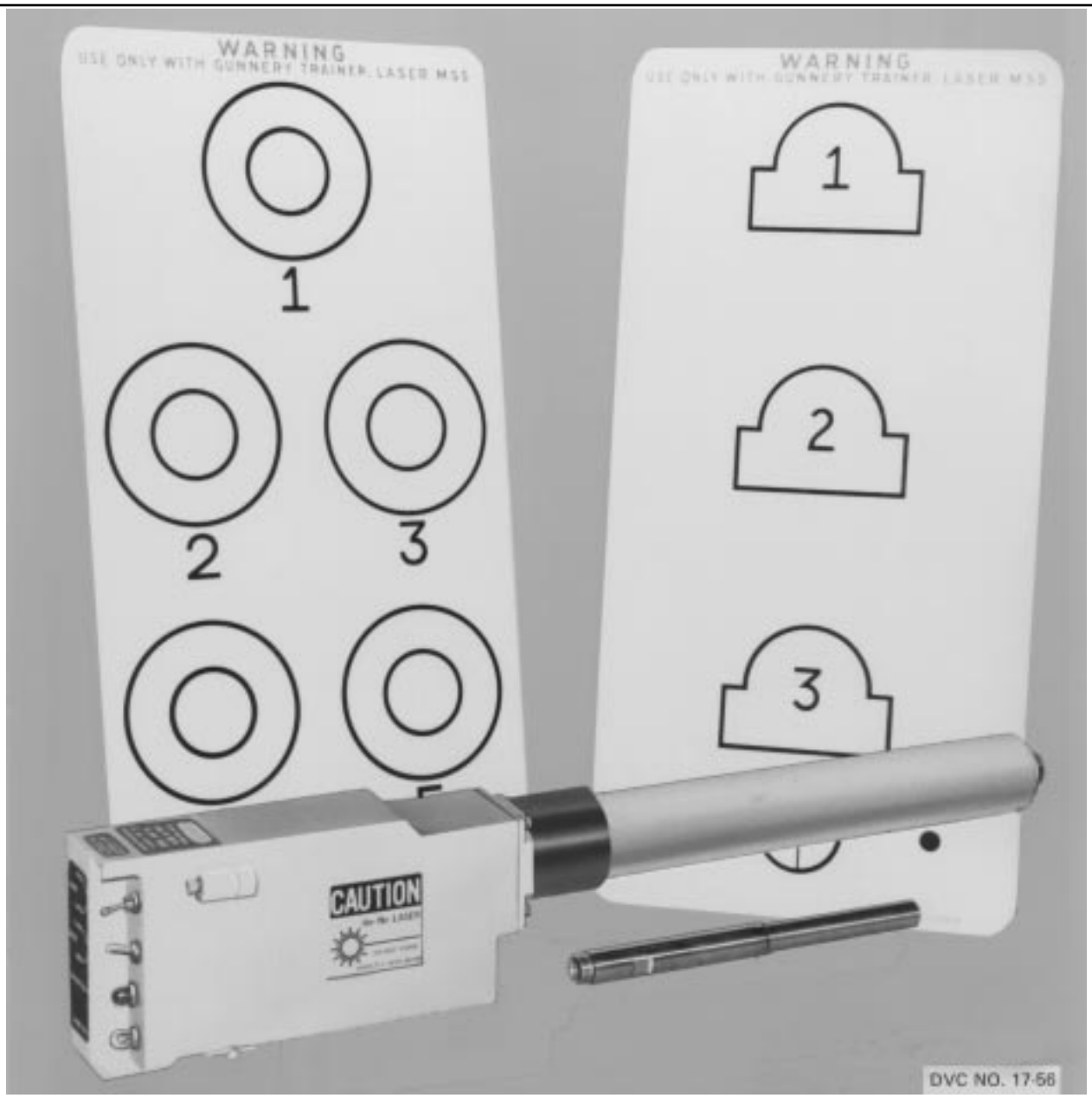
LASER TANK GUNNERY TRAINER



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
ACALA

Source and Method of Obtaining:
Not generally available for issue (limited production)

Purpose of Trainer:
For use on the target range to train crewmen of M48 Series Tanks, M60 Series Tanks, and the M551 Armored Reconnaissance/Airborne Assault Vehicle in gunnery procedures. Specifically, to train crewmen on the proper techniques of:

a. Laying sights on a target
b. Tracking a target
c. Firing the gun
d. Visually adjusting the lay of the weapon on a target.

Functional Description:
The device consists of the following: (1) barrel extension, (2) trainer, laser gunnery, (3) TM 9-6920-357-10, and (4) carrying case.

The trainer is installed on the vehicle's M73/M219 machine gun mount. Each time the main weapon firing circuit in the

vehicle is activated, the simulator provides a single, bright burst of intense red light, visible through vehicle optics as a momentary red spot on the target. This enables the crewmen to accurately determine how well he is laying his gun sights and tracking the target. In addition, a supervising scorer can observe how accurately and proficiently the crewman is operating the vehicle's main weapon system.

The simulator optics can be focused to adjust for a spot ⅝" in diameter at a range of 200 feet. After installation, the vehicle optics must be boresighted to the laser beam before the simulator can be used. The laser trainer is operated from vehicle power.

In addition to the above components three types of targets are provided:

a. A zeroing silhouette target with five circles 4 inches in diameter with crosslines in each circle.

b. An initial lay target with five bull's eyes consisting of concentric circles 4 inches and 8 inches in diameter.

c. A moving target with 15 identical geometric patterns 6 inches high and 8 inches wide, separated by 12 inches on either side and 7 inches top and bottom. A number 2 inches high is inscribed in the center of each pattern. The moving target is not provided with a means for moving it, but must be mounted on a device which provides the motion.

d. Special retroreflective targets are required and lead must be introduced into the gunner's sights to engage moving targets.

e. When mounted in the coaxial position, parallax affects accuracy and targets must be emplaced at the range at which the M55 was zeroed.

f. When used with a Brewster device, parallax is reduced.

Physical Information:
12" x 9" x 35"; 36 lb

Equipment Required, Not Supplied:
None

Special Installation Requirements:
None

Power Requirements:
24 vdc

Applicable Publications:
TM 9-6920-357-10
TM 9-6920-357-10-2
TM 9-6920-357-24&P
DMWR 9-6920-357

Reference Publications:
FM 17-12

Training Requirements Supported:
FM 17-19E1/2, FM 17-19E3, FM 17-19F1/2, FM 1719G1/2, FM 17-19J1/2, and FM 17-19J3

SM 171-127 Tasks

1009	1013	1397	1554
1010	1014	1544	1555
1011	1389	1552	1781
1012	1395		

SM 171-139 Task
1017

5.56MM SUBCALIBER MOUNT (BREWSTER DEVICE)

NSN 6920-01-117-8692 **DVC 17-59/1 M180 (M48/60 Series Tank)**
NSN Pending **DVC 17-59/2 M181 (M551 AR/AAV)**

Training Category/Level Utilized:
Armor/Level 3

Logistic Responsible Command, Service, or Agency:
ACALA

Source and Method of Obtaining:
Available through local TSC.

Purpose of Trainer:
This is a mounting device which permits use of the M16 Rifle or M55 Laser for subcaliber firing at reduced range. This provides a savings in main gun ammunition and allows firing to be done where space is at a premium. It is used in conjunction with the Scaled Range Target System. The specific training requirements supported are shown following the descriptive data.

Functional Description:
The device consists of the following: (1) Universal Mounting Plate Assembly; (2) solenoid, (3) Wiring Harness; (4) Front Mount Subassembly to the Universal mounting plate assembly which allows the mounting of the M16A1 Rifle and the M55 Laser Gunnery Trainer; (5) System Specific Brackets-17-59/1 (M180) for the M48A5; M60, M60A1, M60A3 tanks and 17-59/2 (M181) for the M551 AR/AAV to mount the device on these systems.

Physical Information:
M60/48 Series: 32" x 21" x 10"
M60A2: 32" x 10" x 8"
M551: 32" x 6" x 8"

Equipment Required, Not Supplied:
M55 Laser (DVC 17-56) or M16A1 Rifle with Rimfire Adapter (DVC 07-55)

Special Installation Requirements:
None

Power Requirements:
24 vdc vehicle voltage

Applicable Publications:
TM-9-6920-441-12 & P

Reference Publications:
FM 17-12 with supplements

Training Requirements Supported:
MOSC 19E, 19G, and 19J
SM 171-121 Task
1008

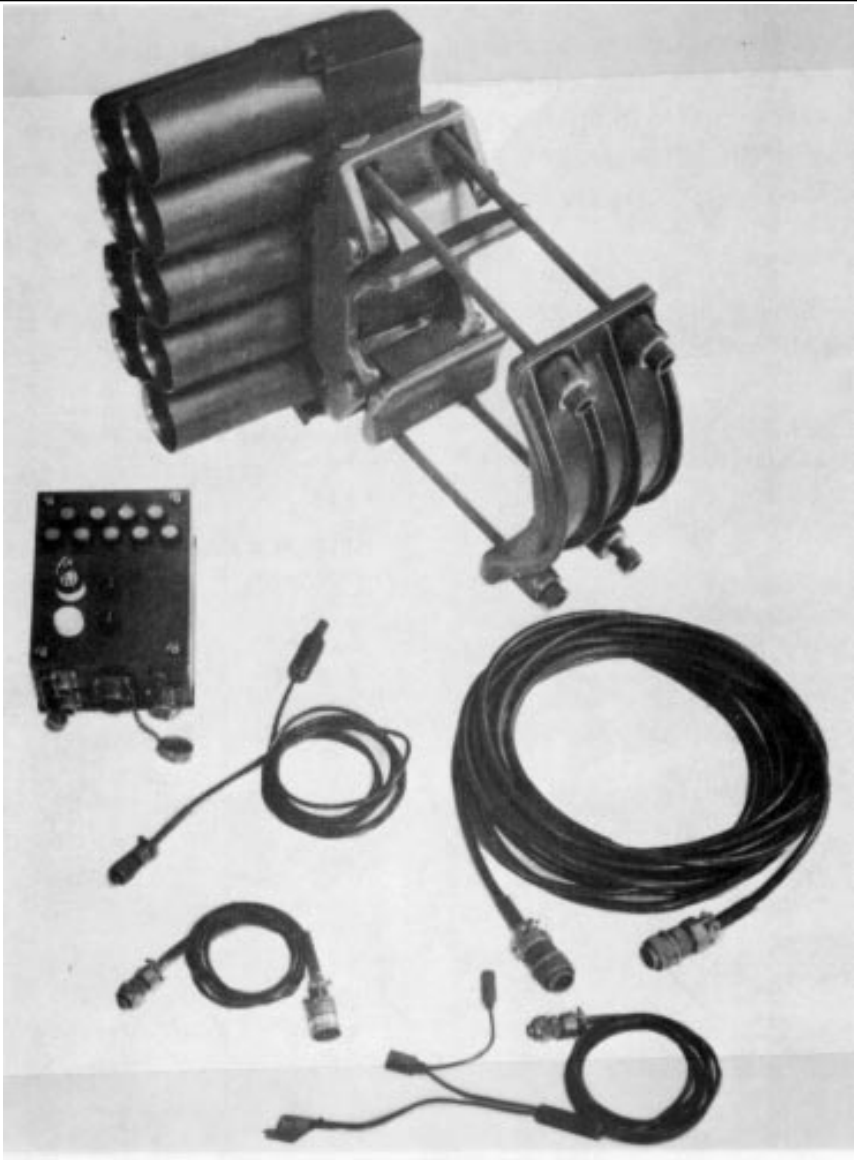
SM 171-127 Tasks

1009	1013	1511	1755
1010	1395	1515	1759
1011	1397	1555	1781
1012	1510		

SM 171-139 Tasks

1009	1030

TANK GUNFIRE SIMULATOR (WESS)



Training Category/Level Utilized:
Armor/Level 3

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Available through local TSC.

Purpose of Trainer:
The trainer was specifically designed for simulating, audibly and visibly, firing of a gun (tank-antitank) in training operations. The shot of the pyro charge simulates the noise, flash, and smoke of the unit it is mounted on. It makes the practice firing very realistic for both day and night firing. It familiarizes the trainees with the flash and explosion of the guns in action.

Functional Description:
The simulator body of the device can be mounted on 90-152mm gun barrels. The simulator body can be loaded with 9 pyro charges (Simulator, Flash, Artillery: M21, NSN 1370-01-034-1397). These are inserted individually into the firing drums. The electrical connections are connected from the simulator to the firing device inside the tank at the gunner's position. The main cable is connected to the 24 volt tank power supply. The gunner controls the firing of the charges from inside the tank, which when activated, simulates the firing of an actual shell. It produces approximately the same noise, flash, and smoke as the actual shell firing. The device

can also be mounted in the field and discharged to indicate a target hit. Different color pyro charges can be used for their specific requirements of utilization in the field.

Physical Information:
Simulator body: 12" x 18" x 12"; 77 lb
Clamp assembly: 13 lb
Firing device: 9" x 6" x 3"; 6 lb
Transport and storage container: 34" x 22" x 15"; 95 lb
Total weight: 200 lb

Equipment Required, Not Supplied:
Simulator, Flash, Artillery, M21; NSN 1370-01-034-1397

Special Installation Requirements:
Instructions for handling Simulator, Flash, Artillery: M21, and safety warning notices as published in Technical Manual for Simulator, Tank Gunfire Device 17-61 should be adhered to.

Safety distances when firing:
To the front of the device: 55 yards (50 meters)
On both sides, to right and left of device: 27 yards (25 meters)

Power Requirements:
24 vdc

Applicable Publications:
Commercial Publication: "Service Instruction No. 61176"

Reference Publications:
None

Training Requirements Supported:
MOSC 19E and 19K series

REMOTED TARGET SYSTEM (RETS)
TARGET HOLDING MECHANISM, TANK GUNNERY (THMTG)

NSN 6920-01-085-8514 DVC 17-63/1 Remoted Target System (RETS) Target Holding Mechanism Tank Gunnery (THMTG) Holding Mechanism

NSN 5840-01-090-9304 DVC 17-63/2 Remoted Target System (RETS) Target Holding Mechanism Tank Gunnery (THMTG) Transmitter Radio

Training Category/Level Utilized:
Armor/Level 3

Logistic Responsible Command, Service, or Agency:
ACALA

Source and Method of Obtaining:
Available through local TSC.

Purpose of Trainer:

Target Holding Mechanism Tank Gunnery (THMTG) is a component of the Remoted Target System (RETS) DVC 09-24. THMTG is also used in other training applications. THMTG supports the training of tank gunnery personnel in identifying and firing on hostile vehicles and personnel. The specific training requirements supported are shown following the descriptive data.

NSN 6920-01-084-6951 **DVC 17-63**

Functional Description:

The trainer consists of a transmitter, transmitter battery (nickel-cadmium), transmitter battery charger, receiver, electronic control assembly, hit sensor assembly, visual hit indicator, tank target mechanisms, tank target mechanism battery charger (lead-acid), and lead-acid battery. The transmitter is man-portable and transmits signals to the receiver. Housing the receiver is the tank target mechanism which, when activated by means of the electronic control unit, elevates and lowers the target. The target will automatically drop to the down position by means of the hit sensor assembly when struck. A visual hit indicator (12 v 15 W lamp) is also activated when the target is struck. Provisions are included to permit a hostile fire indicator.

Physical Information:

Transmitter: 13" x 7" x 7"
Receiver: 5" x 6" x 7"
Tank target mechanism: 61" x 24" x 16"

Equipment Required, Not Supplied:

Silhouette targets

Special Installation Requirements:

None

Power Requirements:

Transmitter: 12 vdc nickel-cadmium battery
Tank target mechanism: 12 vdc lead-acid battery

Applicable Publications:

TM 9-6920-742-14-5
TM 9-6920-742-24P-5

Reference Publications:

FM 17-12 with supplements

Training Requirements Supported:

SM 171-121 Tasks
1008

SM 171-123 Tasks
1204 1354

SM 171- 124 Tasks
1754 2055

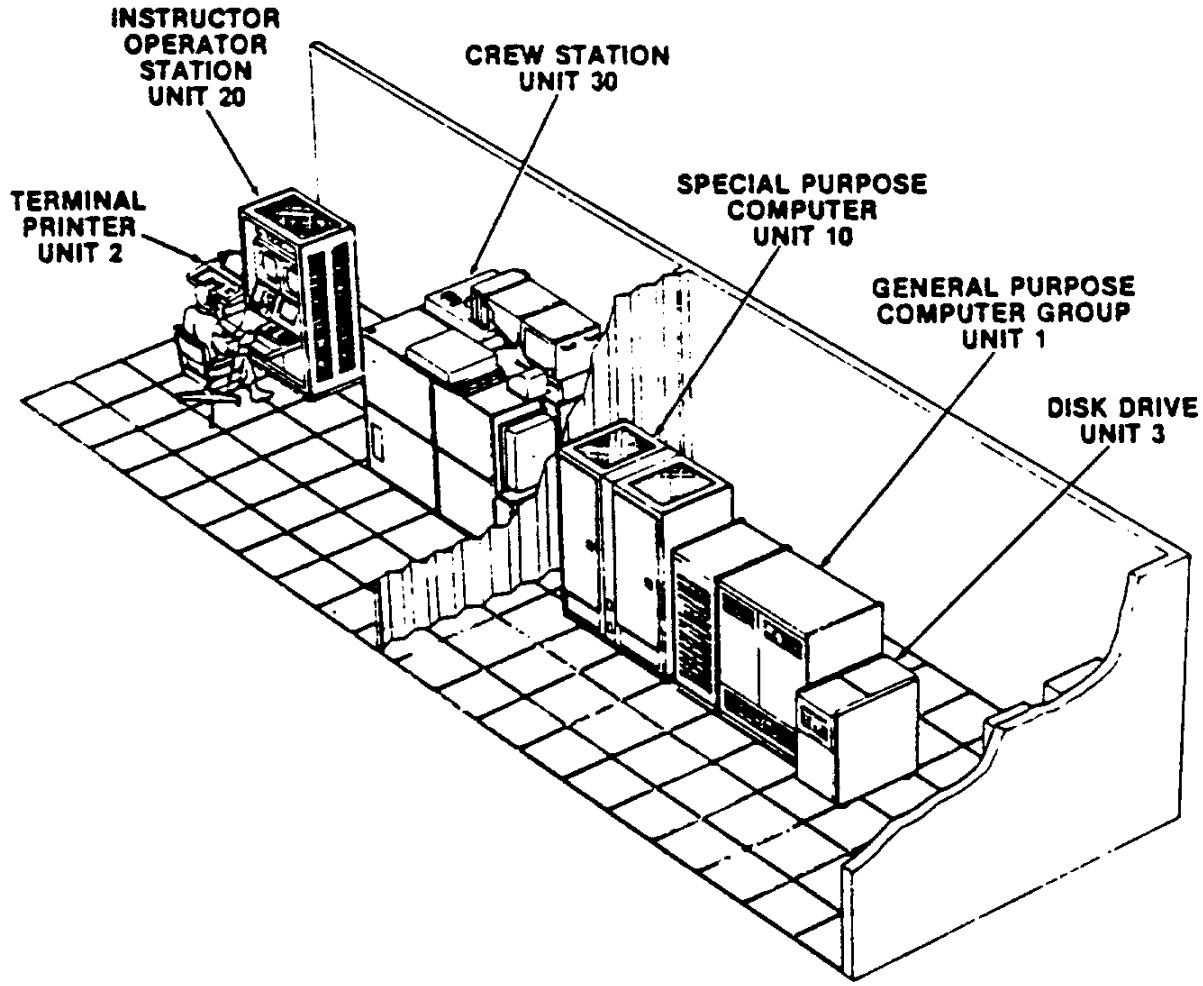
SM 171-127 Tasks

1009	1389	1539	1555
1014	1395	1544	1778
1018	1397	1552	1781
1381	1521		

SM 171-139 Tasks

1016	1017	1036	1038

M1 TANK INSTITUTIONAL CONDUCT OF FIRE TRAINER (M1 I-COFT)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
Provides realistic training for the development of basic and advanced gunnery skills for the M1 Abrams tank commander and gunner.

Functional Description:
DVC 17-65 is a floor-mounted enhanced adaption of four Unit-Conduct of Fire Trainers (U-COFTs) and computer stations each of which provides basic, sustainment, transition and cross-training of critical crew tasks performed by the Abrams tank gunners and vehicle commanders in a training institutional environment. The I-COFT adaptation tailors the basic U-COFT by deleting the shelter subsystems, adding a software package developed to meet institutional training needs and by adding hardware which represents less than a 10% change in the hardware configuration. These additions include an Ethernet Controller that is also being added for the receipt, storage and transfer of the training records of individual gunners and vehicle commanders up to nine (9) I-COFT, i.e., thirty-six (36) U-COFT equivalents. I-COFT is a computer controlled simulator. Two computers, one a general purpose (GPC) and the other a special purpose (SPC), make up the trainer's visual simulation system. The output of the visual subsystem is a high resolution full color video imagery that is viewed through sights and periscopes located in a replicated M1 crew station. The color video provides simulation of tactical battle scenes consisting of a variety of terrain and manmade cultural features and a number of potential target types. An instructor operator station is located next to the crew station. Training is controlled and monitored from this console in consonance with computer

aided instruction techniques. Simulated adverse weather conditions, degraded fire control systems, and a combination of other factors normally encountered by an M1 crew are integrated into the training program.

Physical Information:

4-Special Purpose Computers: 61" x 30" x 75"; 3500 lb. ea.
4-Instructor Operator Stations: 41" x 51" x 72"; 1041 lb. ea.
4-Crew Stations: 65" x 90" x 64"; 2700 lb. ea.
4-General Purpose Computers: 47" x 30" x 64"; 1200 lb. ea.
4-GPC EXP Cabinets: 26" x 30" x 64"; 600 lb. ea.
4-Disk Units: 21" x 36" x 33"; 370 lb. ea.
4-Printers: 28" x 34" x 33"; 150 lb. ea.
Ethernet Connection

Equipment Required, Not Supplied:

None

Special Installation Requirements:

The trainer must be installed in an enclosed, air conditioned building having an available vacant floor space of approximately 11 by 36 feet. Lighting and air conditioning control are pre-established building requirements.

Power Requirements:

SPC: 120/208 vac, 50 A, 3 Phase, 11 KvA
IOS: 120/208 vac, 20A, 3 Phase, 4 KvA
GPC: 120/208 vac, 30 A, 3 Phase, 4 KvA
GPCEXP: 120 vac, 30 A, 1 Phase, N/A
Disk Unit: 120 vac, 11 A, 1 Phase, .77 KvA
Printer: 120 vac, 5 A, 1 Phase, .34 KvA
Miscellaneous: .03 KvA

Applicable Publications:

TM 9-6920-741-10
TM 9-6920-741-23
TM 9-6920-741-23-100
TM 9-6920-741-40
TM 9-6920-741-40-100
HB 17-12-M1

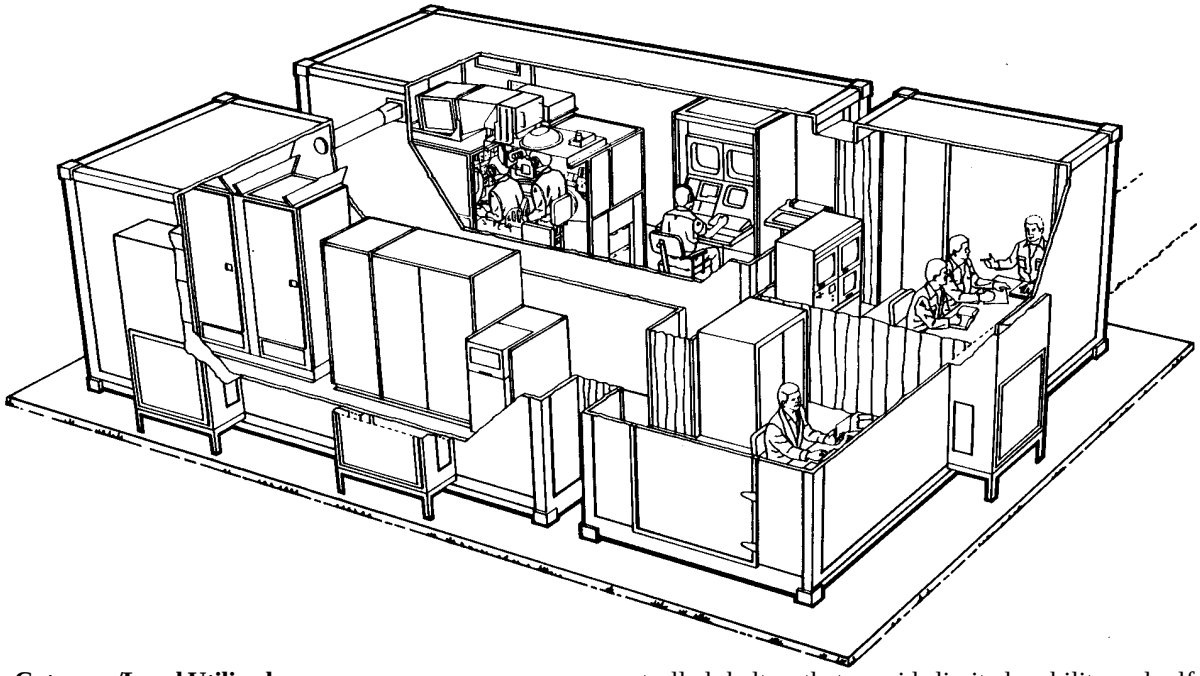
Reference Publications:

None

Training Requirements Supported:

MOSC 19K

M1 TANK UNIT CONDUCT OF FIRE TRAINER (SHELTERED) (M1 U-COFT SHELTERED)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
Provides realistic training for the development of basic and advanced gunnery skills for the Ml Abrams tank commander and gunner.

Functional Description:
DVC 17-66 is a computer-controlled simulator. Two computers, one a general purpose (GPC) and the other, a special purpose (SPC), make up the trainer's visual simulation system. The output of the visual subsystem is a high resolution full color video/imagery that is viewed through sights and periscopes located in a replicated Ml crew station. The color video provides simulation of tactical battle scenes consisting of a variety of terrain and manmade cultural features and a number of potential target types. An instructor operator station is located next to the crew station. Training is controlled and monitored from this console in consonance with computer-aided instruction techniques. Simulated adverse weather conditions, degraded M1 fire control systems, and a combination of other factors normally encountered by an M1 crew are integrated into the training program. DVC 17-66 is housed in three environmentally-controlled shelters that provide limited mobility and self-contained operation. The Computer Shelter contains the GPC, SPC, Disk Drive, and 3 air conditioners. The Trainer Shelter contains the Crew Station, IOS, Terminal Printer, and 1 air conditioner. The Integration Shelter contains the Remote Monitors, Maintenance Area, Debriefing Area, and 1 air conditioner.

Physical Information:
Computer Shelter: 238.5" x 96" x 96"; 12,000 lb
Trainer Shelter: 238.5" x 96" x 96"; 9,000 lb
Integration Shelter: 238.5" x 96" x 96"; 7,000 lb

Equipment Required, Not Supplied:
None

Special Installation Requirements:
The Government provides a clear and level site to specified drainage and compactness, and also electrical and telephone lines. The site must be a minimum of 40' x 38'. When multiple adjacent installations are planned at the same location, the size of each site may be 40' x 32'. The contractor provides a concrete pad and the electrical interface from the power source. In CONUS and where 60Hz power is available at OCONUS sites, the contractor provides an electrical distribution center and isloation transformer as the interface between the power source and the trainer. Where only 50Hz power is available, the contractor installs a transformer. and electrical distribution center or an electrical service center which encompasses both.

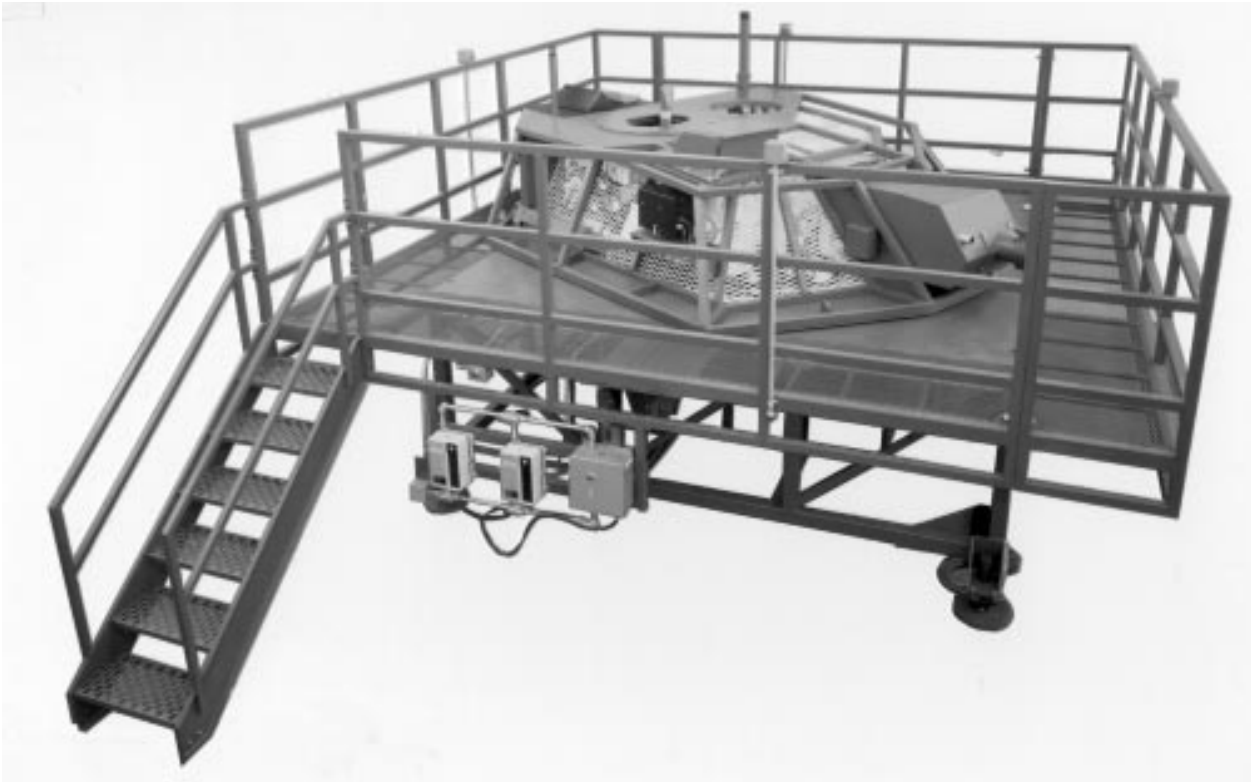
Power Requirements:
(Information not available)

Applicable Publications:
(Information not available)

Reference Publications:
(Information not available)

Training Requirements Supported:
(Information not available)

M1 TANK TURRET ORGANIZATIONAL MAINTENANCE TRAINER (TTOMT)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To train Organizational and DS/GS mechanics in trouble-shooting techniques, removal, replacement and repair of the Ml Tank Systems/components.

Functional Description:
The Tank Turret Organizational Maintenance Trainer (TTOMT) is a computer-controlled, three-dimensional simulation of an M1 tank turret with an instructor's control station mounted immediately behind and on the same rotating platform as the turret. Expanded metal meshwork encloses the turret, allows visibility to personnel on the viewing platform, and allows the instructor/operator to observe activity in the trainer.

The TTOMT consists of actual M1 tank operating components, active simulated components, trainer peculiar components, and fully simulated space-constraint dummy components. It allows students to:

a. Troubleshoot simulated equipment failures.

b. Remove and replace components of the turret hydraulic, fire control, electrical, and armament systems.

c. Service main accumulator, Gunner's Auxiliary Sight, Commander's Station Gunner's Primary Sight extension, and Laser Rangefinder optical and electrical cavities.

d. Operate the turret, including traversing and elevating simulated main and secondary weapons.

Physical Information:
22' L x 14' H x 16' W; 15,000 lbs

Equipment Required, Not Supplied:
None

Special Installation Requirements:
Minimum access to installation area for TTOMT is 35' L x 25' W x 14' H; floor capable of bearing 17,000 lb load

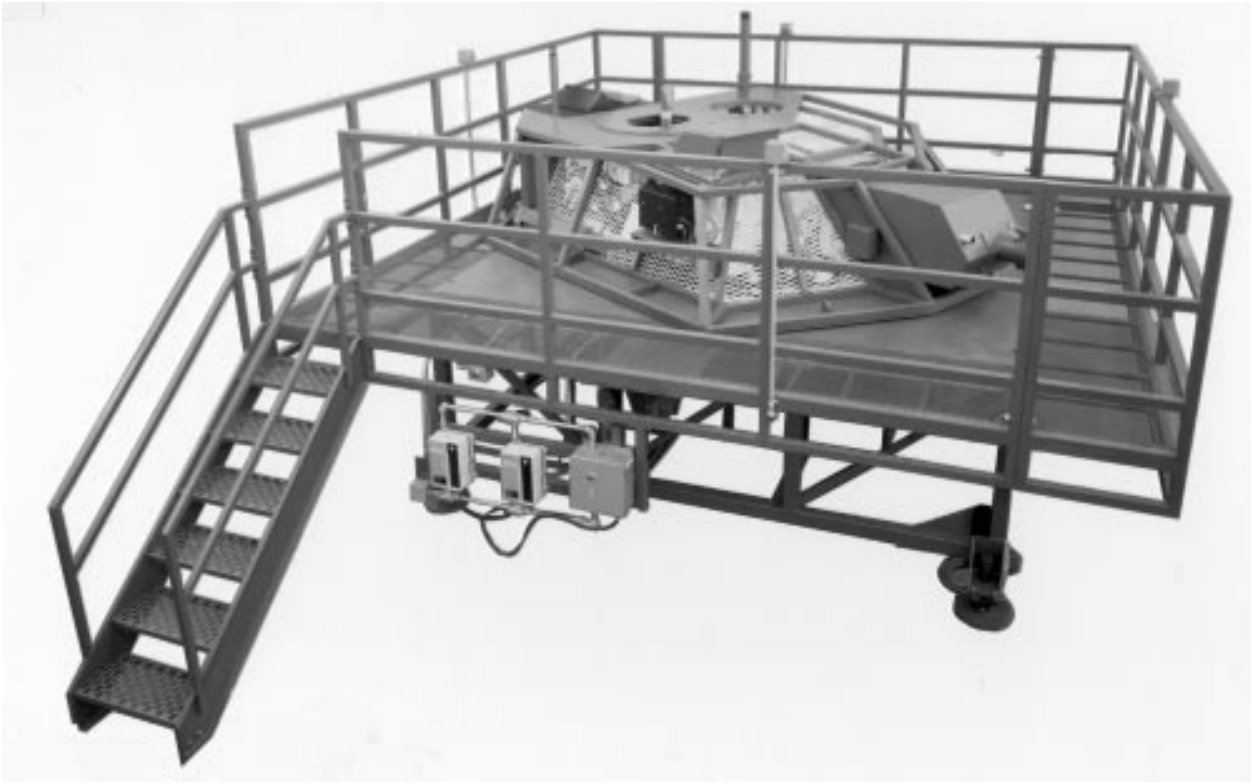
Power Requirements:
110 vac, 15 A, 50/60 Hz single-phase

Applicable Publications:
TM 9-6910-242-10
TM 9-6910-242-24&P

Reference Publications:
None

Training Requirements Supported:
MOSC 45K

M1A1 TANK TURRET ORGANIZATIONAL MAINTENANCE TRAINER (TTOMT)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To train Organizational and DS/GS mechanics in trouble-shooting techniques, removal, replacement and repair of the M1A1 Tank Systems/components.

Functional Description:
The Tank Turret Organizational Maintenance Trainer (TTOMT) is a computer-controlled, three-dimensional simulation of an M1A1 tank turret with an instructor's control station mounted immediately behind and on the same rotating platform as the turret. Expanded metal meshwork encloses the turret, allows visibility to personnel on the viewing platform, and allows the instructor/operator to observe activity in the trainer.

The TTOMT consists of actual M1A1 tank operating components, active simulated components, trainer peculiar components, and fully simulated space-constraint dummy components. It allows students to:

a. Troubleshoot simulated equipment failures.

b. Remove and replace components of the turret hydraulic, fire control, electrical, and armament systems.

c. Service main accumulator, Gunner's Auxiliary Sight, Commander's Station Gunner's Primary Sight extension, and Laser Rangefinder optical and electrical cavities.

d. Operate the turret, including traversing and elevating simulated main and secondary weapons.

Physical Information:
22' L x 14' H x 16' W; 15,000 lbs

Equipment Required, Not Supplied:
None

Special Installation Requirements:
Minimum access to installation area for TTOMT is 35' L x 25' W x 14' H; floor capable of bearing 17,000 lb load

Power Requirements:
110 vac, 15 A, 50/60 Hz single-phase

Applicable Publications:
TD 9-6910-702-10
TD 9-6910-702-24&P

Reference Publications:
None

Training Requirements Supported:
MOSC 45K

M1 TANK TURRET ORGANIZATIONAL MAINTENANCE TROUBLESHOOTING TRAINER (TOMT) PANEL

Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To train personnel on organizational maintenance and operation of the M1 Tank turret systems. Troubleshooting, removal/replacement and maintenance service tasks on the M1 Tank are simulated.

Functional Description:
The Turret Organizational Maintenance Trainer Panel (TOMT) is a freestanding, computer-based, simulation-type troubleshooting trainer. It consists of the following major components:

a. The Display Panel is an upright plane surface containing a combination of pictorials, controls, switches and displays that simulate M1 turret system components, controls, and displays.

b. The Computer System provides control of the simulated malfunction exercises/operating conditions and monitors the condition of system indicators and switches.

c. The Projector/Viewer Assembly allows the projection of visual slides in accordance with actions taken on the control console. The slides are pictures, messages, or a combination of both that provide information about components, malfunctions, tests, actions, and hazards.

d. The Terminal and Keyboard provide a communications interface with the computer.

e. The Control Console is used to control the operation of the system and monitor student performance. It is also used to apply power to the system, test the system, set the time standard, and introduce mal-function exercises into the system.

f. The Printer provides a printed record of student progress.

g. The Power Distribution Assembly provides control, distribution, and overload protection of ac and dc voltages for the trainer.

h. The Black Set Communicator is an externally connected device that provides a communications interface between the operator and trainer.

Physical Information:
120" L x 72" H x 29" D; 485 lbs

Equipment Required, Not Supplied:
None

Special Installation Requirements:
None

Power Requirements:
110 vac, 15 A, 50/60 Hz single-phase

Applicable Publications:
TM 9-6910-243-10
TM 9-6910-243-24&P

Reference Publications:
None

Training Requirements Supported:
MOSC 45K

M1 TANK TURRET ELECTRICAL AND HYDRAULIC TROUBLESHOOTING TRAINER (TEHTT) PANEL

Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To train personnel on maintenance and operation of the M1 Tank Turret Electrical and Hydraulic systems. The device simulates M1 tank components and provides computer-controlled malfunctions which simulate various equipment faults in order to familiarize mechanics with the duties required to maintain the M1 tank systems.

Functional Description:
The M1 Tank Turret Electrical and Hydraulic Troubleshooting Trainer (TEHTT) Panel is a freestanding, computer-based, simulation-type troubleshooting trainer. It consists of the following major components:

a. The Display Panel is an upright plane surface containing a combination of pictorials, controls, switches and displays that simulate M1 turret system components, controls, and displays.

b. The Computer System provides control of the simulated malfunction exercises/operating conditions and monitors the condition of system indicators and switches.

c. The Projector/Viewer Assembly allows the projection of visual slides in accordance with actions taken on the control console. The slides are pictures, messages, or a combination of both that provide information about components, malfunctions, tests, actions, and hazards.

d. The Terminal and Keyboard provide a communications interface with the computer.

e. The Control Console is used to control the operation of the system and monitor student performance. It is also used to apply power to the system, test the system, set the time standard, and introduce malfunction exercises into the system.

f. The Printer provides a printed record of student progress.

g. The Power Distribution Assembly provides control, distribution, and overload protection of ac and dc voltages for the trainer.

h. The Black Set Communicator is an externally connected device that provides a communications interface between the operator and trainer.

Physical Information:
120" L x 72" H x 29" D; 485 lbs

Equipment Required, Not Supplied:
None

Special Installation Requirements:
None

Power Requirements:
110 vac, 15 A, 50/60 Hz single-phase

Applicable Publications:
TM 9-6910-245-10
TM 9-6910-245-24&P

Reference Publications:
None

Training Requirements Supported:
MOSC 45K

M1 TANK BALLISTIC COMPUTER AND LASER RANGEFINDER (BCLR) TROUBLE-SHOOTING TRAINER PANEL

Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To train personnel on maintenance and operation of the M1 Tank Ballistic Computer and Laser Rangefinder systems. The device simulates M1 tank components and provides computer-controlled malfunctions which simulate various equipment faults in order to familiarize mechanics with the duties required to maintain the M1 tank systems.

Functional Description:
The M1 Tank Ballistic Computer and Laser Rangefinder (BCLR) Troubleshooting Trainer Panel is a freestanding, computer-based, simulation-type troubleshooting trainer. It consists of the following major components:

a. The Display Panel is an upright plane surface containing a combination of pictorials, controls, switches and displays that simulate M1 turret system components, controls, and displays.

b. The Computer System provides control of the simulated malfunction exercises/operating conditions and monitors the condition of system indicators and switches.

c. The Projector/Viewer Assembly allows the projection of visual slides in accordance with actions taken on the control console. The slides are pictures, messages, or a combination of both that provide information about components, malfunctions, tests, actions, and hazards.

d. The Terminal and Keyboard provide a communications interface with the computer.

e. The Control Console is used to control the operation of the system and monitor student performance. It is also used to apply power to the system, test the system, set the time standard, and introduce malfunction exercises into the system.

f. The Printer provides a printed record of student progress.

g. The Power Distribution Assembly provides control, distribution, and overload protection of ac and dc voltages for the trainer.

h. The Black Set Communicator is an externally connected device that provides a communications interface between the operator and trainer.

Physical Information:
120" L x 72" H x 29" D; 485 lbs

Equipment Required, Not Supplied:
None

Special Installation Requirements:
None

Power Requirements:
110 vac, 15 A, 50/60 Hz single-phase

Applicable Publications:
TM 9-6910-244-10
TM 9-6910-244-24&P

Reference Publications:
None

Training Requirements Supported:
MOSC 34G

M1 TANK HULL ELECTRICAL (HULL) TROUBLESHOOTING TRAINER PANEL

Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To train personnel on maintenance and operation of the M1 Tank Hull Electrical systems. The device simulates M1 tank components and provides computer-controlled malfunctions which simulate various equipment faults in order to familiarize mechanics with the duties required to maintain the M1 tank systems.

Functional Description:
The M1 Tank Hull Electrical (HULL) Troubleshooting Trainer Panel is a freestanding, computer-based, simulation-type troubleshooting trainer. It consists of the following major components:

a. The Display Panel is an upright plane surface containing a combination of pictorials, controls, switches and displays that simulate M1 turret system components, controls, and displays.

b. The Computer System provides control of the simulated malfunction exercises/operating conditions and monitors the condition of system indicators and switches.

c. The Projector/Viewer Assembly allows the projection of visual slides in accordance with actions taken on the control console. The slides are pictures, messages, or a combination of both that provide information about components, malfunctions, tests, actions, and hazards.

d. The Terminal and Keyboard provide a communications interface with the computer.

e. The Control Console is used to control the operation of the system and monitor student performance. It is also used to apply power to the system, test the system, set the time standard, and introduce malfunction exercises into the system.

f. The Printer provides a printed record of student progress.

g. The Power Distribution Assembly provides control, distribution, and overload protection of ac and dc voltages for the trainer.

h. The Black Set Communicator is an externally connected device that provides a communications interface between the operator and trainer.

Physical Information:
120" L x 72" H x 29" D; 485 lbs

Equipment Required, Not Supplied:
None

Special Installation Requirements:
None

Power Requirements:
110 vac, 15 A, 50/60 Hz single-phase

Applicable Publications:
TM 9-6910-248-10
TM 9-6910-248-24&P

Reference Publications:
None

Training Requirements Supported:
MOSC 63G

M1 TANK AGT 1500 TURBINE ENGINE TROUBLESHOOTING TRAINER PANEL

Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To train personnel on maintenance and operation of the M1 Tank AGT 1500 Turbine Engine systems. The device simulates M1 tank components and provides computer-controlled malfunctions which simulate various equipment faults in order to familiarize mechanics with the duties required to maintain the M1 tank systems.

Functional Description:
The M1 Tank AGT 1500 Turbine Engine Troubleshooting Trainer Panel is a freestanding, computer-based, simulation-type troubleshooting trainer. It consists of the following major components:

a. The Display Panel is an upright plane surface containing a combination of pictorials, controls, switches and displays that simulate M1 turret system components, controls, and displays.

b. The Computer System provides control of the simulated malfunction exercises/operating conditions and monitors the condition of system indicators and switches.

c. The Projector/Viewer Assembly allows the projection of visual slides in accordance with actions taken on the control console. The slides are pictures, messages, or a combination of both that provide information about components, malfunctions, tests, actions, and hazards.

d. The Terminal and Keyboard provide a communications interface with the computer.

e. The Control Console is used to control the operation of the system and monitor student performance. It is also used to apply power to the system, test the system, set the time standard, and introduce malfunction exercises into the system.

f. The Printer provides a printed record of student progress.

g. The Power Distribution Assembly provides control, distribution, and overload protection of ac and dc voltages for the trainer.

h. The Black Set Communicator is an externally connected device that provides a communications interface between the operator and trainer.

Physical Information:
120" L x 72" H x 29" D; 485 lbs

Equipment Required, Not Supplied:
None

Special Installation Requirements:
None

Power Requirements:
110 vac, 15 A, 50/60 Hz single-phase

Applicable Publications:
TM 9-6910-247-10
TM 9-6910-247-24&P

Reference Publications:
None

Training Requirements Supported:
MOSC 63H

M1 TANK X1100-3B TRANSMISSION (TRANS) TROUBLESHOOTING TRAINER PANEL

Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To train personnel on maintenance and operation of the M1 Tank X1100-3B Transmission systems. The device simulates M1 tank components and provides computer-controlled malfunctions which simulate various equipment faults in order to familiarize mechanics with the duties required to maintain the M1 tank systems.

Functional Description:
The M1 Tank X1100-3B Transmission (TRANS) Troubleshooting Trainer Panel is a freestanding, computer-based, simulation-type troubleshooting trainer. It consists of the following major components:

a. The Display Panel is an upright plane surface containing a combination of pictorials, controls, switches and displays that simulate M1 turret system components, controls, and displays.

b. The Computer System provides control of the simulated malfunction exercises/operating conditions and monitors the condition of system indicators and switches.

c. The Projector/Viewer Assembly allows the projection of visual slides in accordance with actions taken on the control console. The slides are pictures, messages, or a combination of both that provide information about components, malfunctions, tests, actions, and hazards.

d. The Terminal and Keyboard provide a communications interface with the computer.

e. The Control Console is used to control the operation of the system and monitor student performance. It is also used to apply power to the system, test the system, set the time standard, and introduce malfunction exercises into the system.

f. The Printer provides a printed record of student progress.

g. The Power Distribution Assembly provides control, distribution, and overload protection of ac and dc voltages for the trainer.

h. The Black Set Communicator is an externally connected device that provides a communications interface between the operator and trainer.

Physical Information:
120" L x 72" H x 29" D; 485 lbs

Equipment Required, Not Supplied:
None

Special Installation Requirements:
None

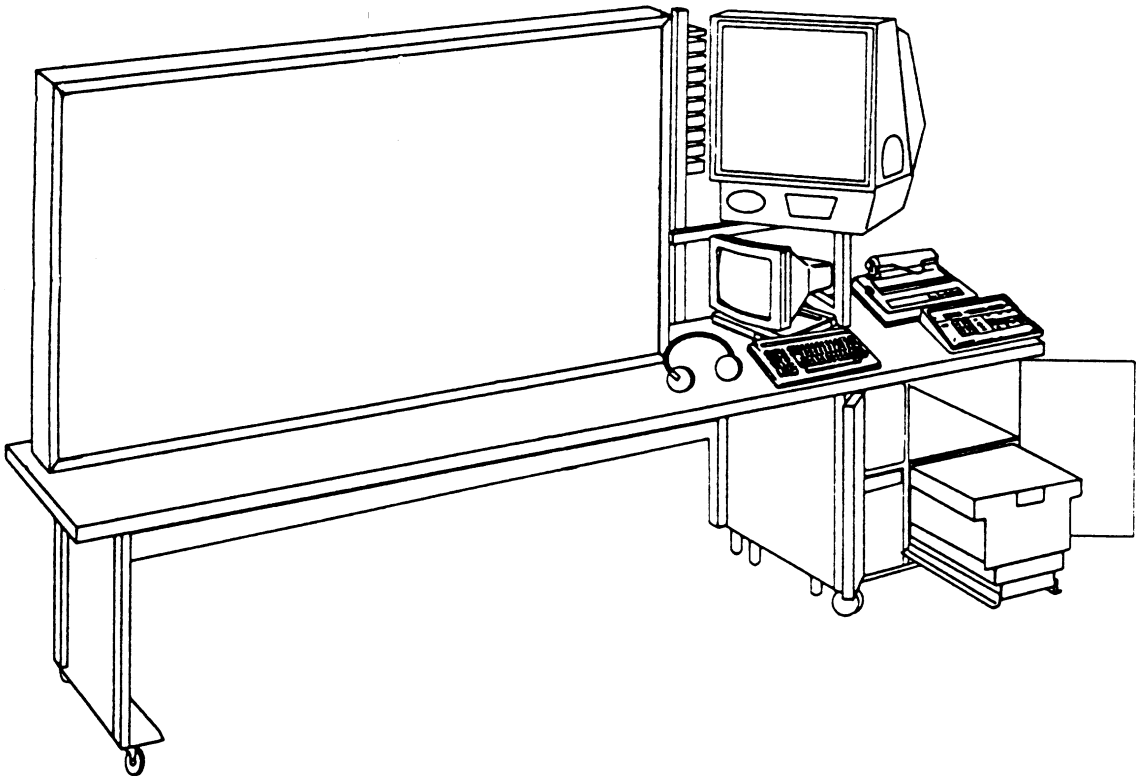
Power Requirements:
110 vac, 15 A, 50/60 Hz single-phase

Applicable Publications:
TM 9-6910-246-10
TM 9-6910-246-24&P

Reference Publications:
None

Training Requirements Supported:
MOSC 63H

M1A1 TANK TURRET ORGANIZATIONAL MAINTENANCE TROUBLESHOOTING TRAINER (TOMT) PANEL



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To train personnel on organizational maintenance and operation of the M1A1 Tank turret systems. Troubleshooting, removal/replacement and maintenance service tasks on the M1A1 Tank are simulated.

Functional Description:
The Turret Organizational Maintenance Trainer Panel (TOMT) is a freestanding, computer-based, simulation-type troubleshooting trainer. It consists of the following major components:

a. The Display Panel is an upright plane surface containing a combination of pictorials, controls, switches and displays that simulate M1A1 turret system components, controls, and displays.

b. The Computer System provides control of the simulated malfunction exercises/operating conditions and monitors the condition of system indicators and switches.

c. The Projector/Viewer Assembly allows the projection of visual slides in accordance with actions taken on the control console. The slides are pictures, messages, or a combination of both that provide information about components, malfunctions, tests, actions, and hazards.

d. The Terminal and Keyboard provide a communications interface with the computer.

e. The Control Console is used to control the operation of the system and monitor student performance. It is also used to apply power to the system, test the system, set the time standard, and introduce malfunction exercises into the system.

f. The Printer provides a printed record of student progress.

g. The Power Distribution Assembly provides control, distribution, and overload protection of ac and dc voltages for the trainer.

h. The Black Set Communicator is an externally connected device that provides a communications interface between the operator and trainer.

Physical Information:
120" L x 72" H x 29" D; 485 lbs

Equipment Required, Not Supplied:
None

Special Installation Requirements:
None

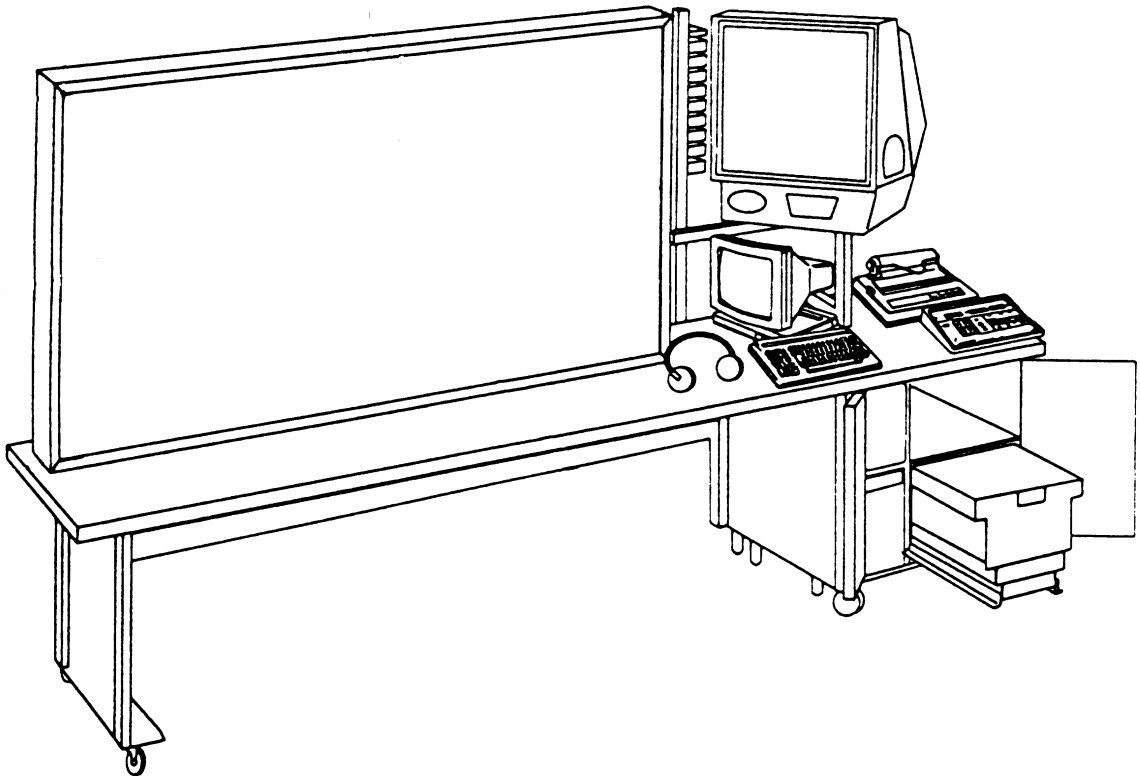
Power Requirements:
110 vac, 15 A, 50/60 Hz single-phase

Applicable Publications:
TD 9-6910-703-10
TD 9-6910-703-24&P

Reference Publications:
None

Training Requirements Supported:
MOSC 45K

M1A1 TANK TURRET ELECTRICAL AND HYDRAULIC TROUBLESHOOTING TRAINER (TEHTT) PANEL



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To train personnel on maintenance and operation of the M1A1 Tank Turret Electrical and Hydraulic systems. The device simulates M1A1 tank components and provides computer-controlled malfunctions which simulate various equipment faults in order to familiarize mechanics with the duties required to maintain the M1A1 tank systems.

Functional Description:
The M1A1 Tank Turret Electrical and Hydraulic Troubleshooting Trainer (TEHTT) Panel is a freestanding, computer-based, simulation-type troubleshooting trainer. It consists of the following major components:

a. The Display Panel is an upright plane surface containing a combination of pictorials, controls, switches and displays that simulate M1A1 turret system components, controls, and displays.

b. The Computer System provides control of the simulated malfunction exercises/operating conditions and monitors the condition of system indicators and switches.

c. The Projector/Viewer Assembly allows the projection of visual slides in accordance with actions taken on the control console. The slides are pictures, messages, or a combination of both that provide information about components, malfunctions, tests, actions, and hazards.

d. The Terminal and Keyboard provide a communications interface with the computer.

e. The Control Console is used to control the operation of the system and monitor student performance. It is also used to apply power to the system, test the system, set the time standard, and introduce malfunction exercises into the system.

f. The Printer provides a printed record of student progress.

g. The Power Distribution Assembly provides control, distribution, and overload protection of ac and dc voltages for the trainer.

h. The Black Set Communicator is an externally connected device that provides a communications interface between the operator and trainer.

NSN None **DVC 17-68A/2**

Physical Information:
120" L x 72" H x 29" D; 485 lbs

Equipment Required, Not Supplied:
None

Special Installation Requirements:
None

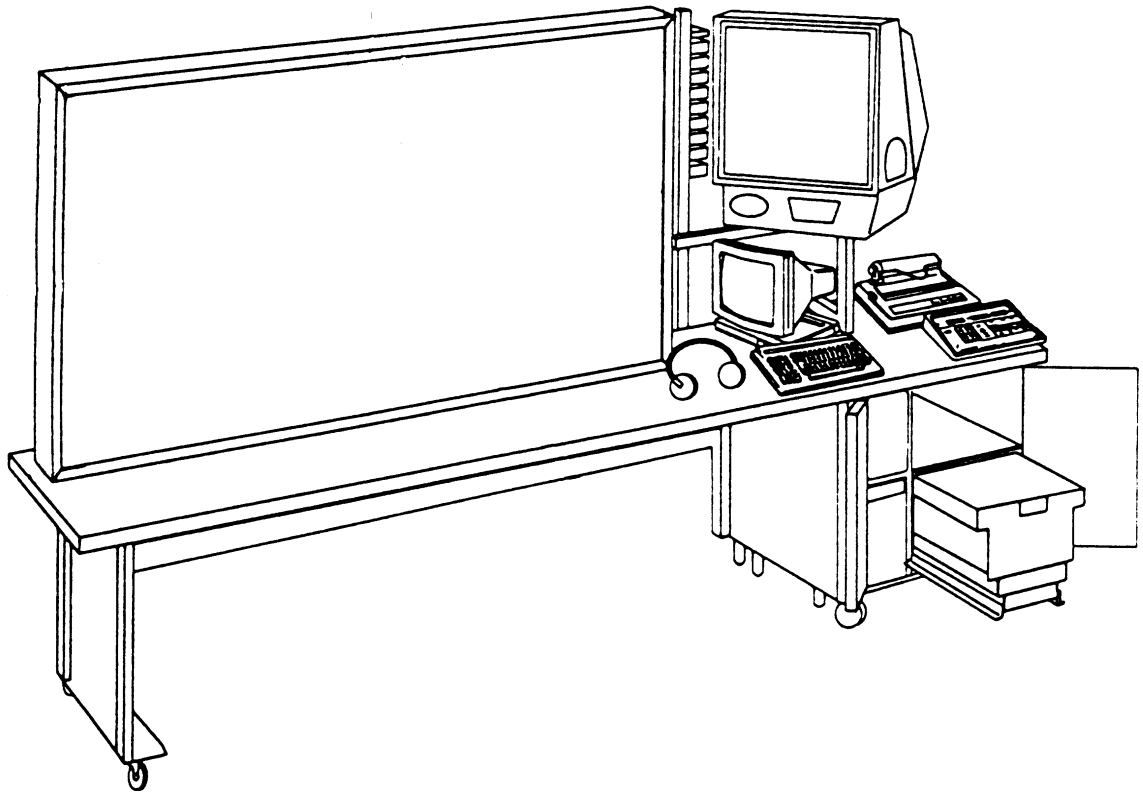
Power Requirements:
110 vac, 15 A, 50/60 Hz single-phase

Applicable Publications:
TD 9-6910-705-10
TD 9-6910-705-24&P

Reference Publications:
None

Training Requirements Supported:
MOSC 45K

M1A1 TANK BALLISTIC COMPUTER AND LASER RANGEFINDER (BCLR) TROUBLESHOOTING TRAINER PANEL



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To train personnel on maintenance and operation of the M1A1 Tank Ballistic Computer and Laser Rangefinder systems. The device simulates M1A1 tank components and provides computer-controlled malfunctions which simulate various equipment faults in order to familiarize mechanics with the duties required to maintain the M1A1 tank systems.

Functional Description:
The M1A1 Tank Ballistic Computer and Laser Rangefinder (BCLR) Troubleshooting Trainer Panel is a freestanding, computer-based, simulation-type troubleshooting trainer. It consists of the following major components:

a. The Display Panel is an upright plane surface containing a combination of pictorials, controls, switches and displays that simulate M1A1 turret system components, controls, and displays.

b. The Computer System provides control of the simulated malfunction exercises/operating conditions and monitors the condition of system indicators and switches.

c. The Projector/Viewer Assembly allows the projection of visual slides in accordance with actions taken on the control console. The slides are pictures, messages, or a combination of both that provide information about components, malfunctions, tests, actions, and hazards.

d. The Terminal and Keyboard provide a communications interface with the computer.

e. The Control Console is used to control the operation of the system and monitor student performance. It is also used to apply power to the system, test the system, set the time standard, and introduce malfunction exercises into the system.

f. The Printer provides a printed record of student progress.

g. The Power Distribution Assembly provides control, distribution, and overload protection of ac and dc voltages for the trainer.

h. The Black Set Communicator is an externally connected device that provides a communications interface between the operator and trainer.

Physical Information:
120" L x 72" H x 29" D; 485 lbs

Equipment Required, Not Supplied:
None

Special Installation Requirements:
None

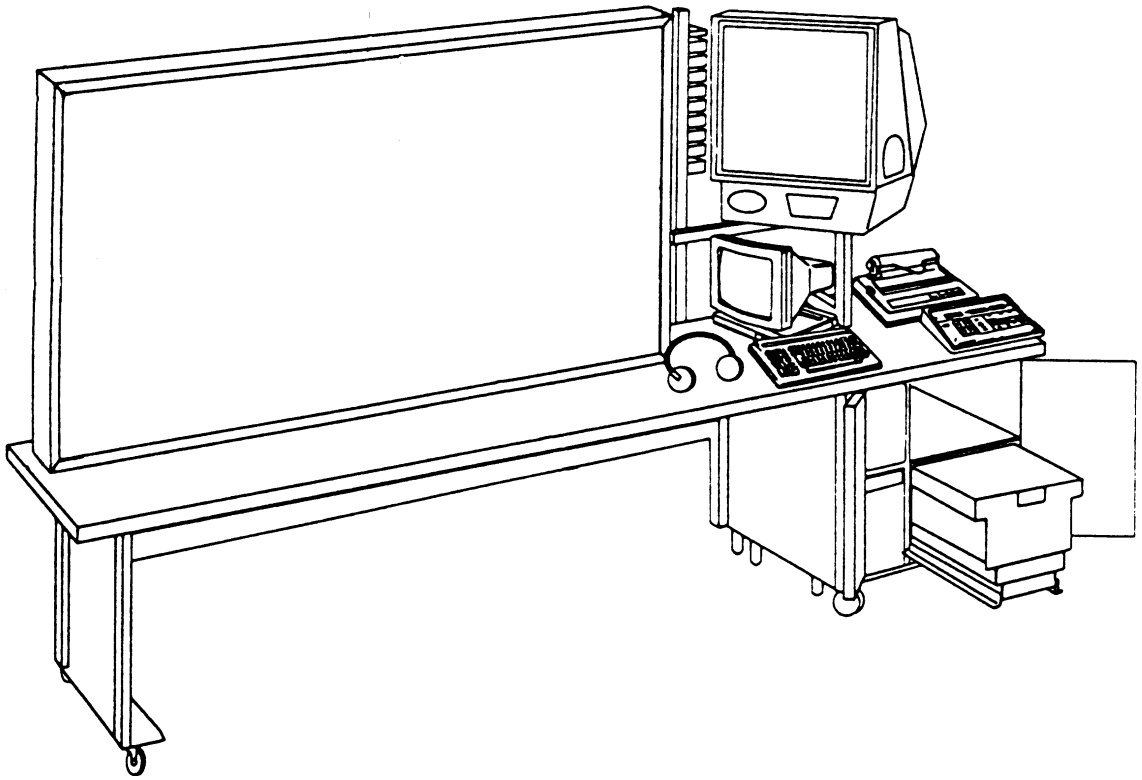
Power Requirements:
110 vac, 15 A, 50/60 Hz single-phase

Applicable Publications:
TD 9-6910-704-10
TD 9-6910-704-24&P

Reference Publications:
None

Training Requirements Supported:
MOSC 34G

M1A1 TANK HULL ELECTRICAL (HULL) TROUBLESHOOTING TRAINER PANEL



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To train personnel on maintenance and operation of the M1A1 Tank Hull Electrical systems. The device simulates M1A1 tank components and provides computer-controlled malfunctions which simulate various equipment faults in order to familiarize mechanics with the duties required to maintain the M1A1 tank systems.

Functional Description:
The M1A1 Tank Hull Electrical (HULL) Troubleshooting Trainer Panel is a freestanding, computer-based, simulation-type troubleshooting trainer. It consists of the following major components:

a. The Display Panel is an upright plane surface containing a combination of pictorials, controls, switches and displays that simulate M1A1 turret system components, controls, and displays.

b. The Computer System provides control of the simulated malfunction exercises/operating conditions and monitors the condition of system indicators and switches.

c. The Projector/Viewer Assembly allows the projection of visual slides in accordance with actions taken on the control console. The slides are pictures, messages, or a combination of both that provide information about components, malfunctions, tests, actions, and hazards.

d. The Terminal and Keyboard provide a communications interface with the computer.

e. The Control Console is used to control the operation of the system and monitor student performance. It is also used to apply power to the system, test the system, set the time standard, and introduce malfunction exercises into the system.

f. The Printer provides a printed record of student progress.

g. The Power Distribution Assembly provides control, distribution, and overload protection of ac and dc voltages for the trainer.

h. The Black Set Communicator is an externally connected device that provides a communications interface between the operator and trainer..

Physical Information:
120" L x 72" H x 29" D; 485 lbs

Equipment Required, Not Supplied:
None

Special Installation Requirements:
None

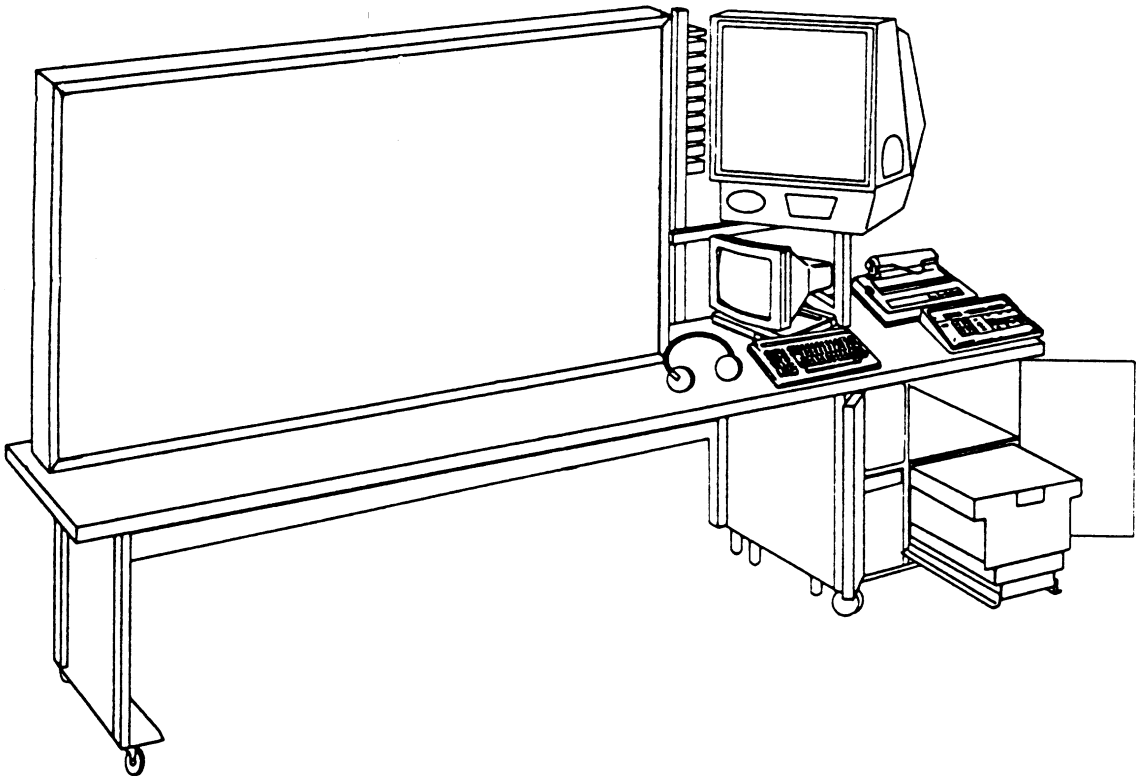
Power Requirements:
110 vac, 15 A, 50/60 Hz single-phase

Applicable Publications:
TD 9-6910-708-10
TD 9-6910-708-24&P

Reference Publications:
None

Training Requirements Supported:
MOSC 63G

M1A1 TANK AGT 1500 TURBINE ENGINE TROUBLESHOOTING TRAINER PANEL



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To train personnel on maintenance and operation of the M1A1 Tank AGT 1500 Turbine Engine systems. The device simulates M1A1 tank components and provides computer-controlled malfunctions which simulate various equipment faults in order to familiarize mechanics with the duties required to maintain the M1A1 tank systems.

Functional Description:
The M1A1 Tank AGT 1500 Turbine Engine Troubleshooting Trainer Panel is a freestanding, computer-based, simulation-type troubleshooting trainer. It consists of the following major components:

a. The Display Panel is an upright plane surface containing a combination of pictorials, controls, switches and displays that simulate M1A1 turret system components, controls, and displays.

b. The Computer System provides control of the simulated malfunction exercises/operating conditions and monitors the condition of system indicators and switches.

c. The Projector/Viewer Assembly allows the projection of visual slides in accordance with actions taken on the control console. The slides are pictures, messages, or a combination of both that provide information about components, malfunctions, tests, actions, and hazards.

d. The Terminal and Keyboard provide a communications interface with the computer.

e. The Control Console is used to control the operation of the system and monitor student performance. It is also used to apply power to the system, test the system, set the time standard, and introduce malfunction exercises into the system.

f. The Printer provides a printed record of student progress.

g. The Power Distribution Assembly provides control, distribution, and overload protection of ac and dc voltages for the trainer.

h. The Black Set Communicator is an externally connected device that provides a communications interface between the operator and trainer.

Physical Information:
120" L x 72" H x 29" D; 485 lbs

Equipment Required, Not Supplied:
None

Special Installation Requirements:
None

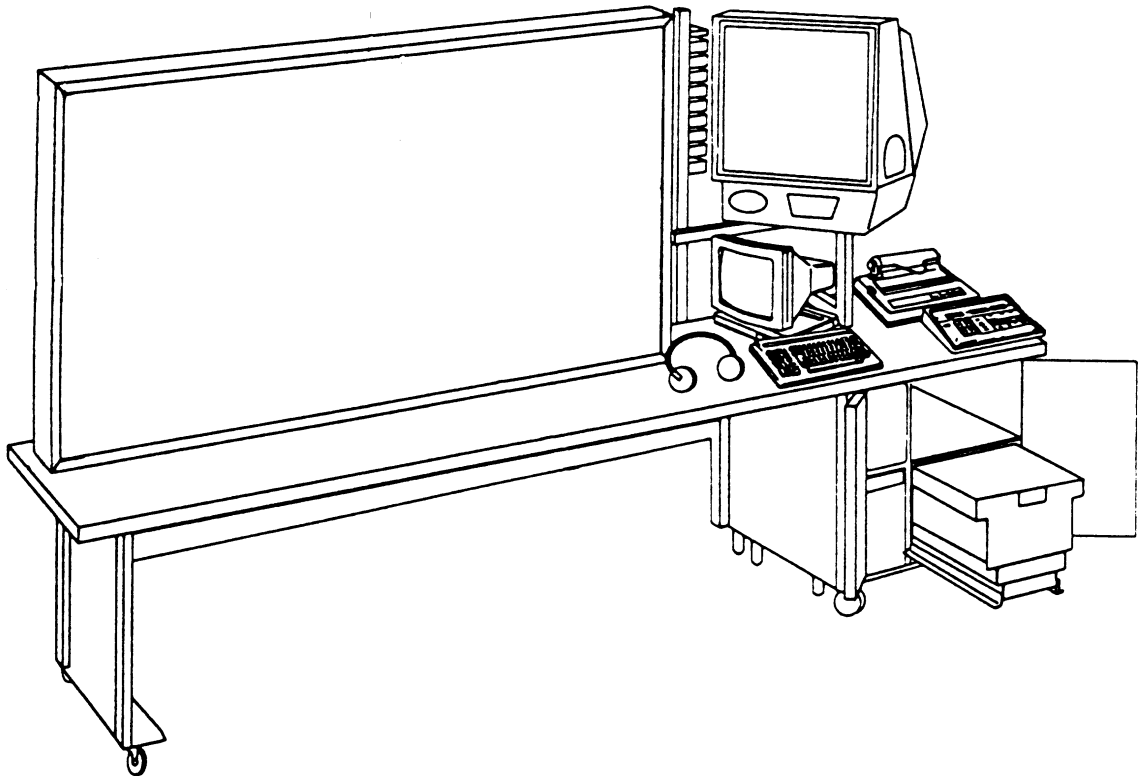
Power Requirements:
110 vac, 15 A, 50/60 Hz single-phase

Applicable Publications:
TD 9-6910-707-10
TD 9-6910-707-24&P

Reference Publications:
None

Training Requirements Supported:
MOSC 63H

M1A1 TANK X1100-3B TRANSMISSION (TRANS) TROUBLESHOOTING TRAINER PANEL



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To train personnel on maintenance and operation of the M1A1 Tank X1100-3B Transmission systems. The device simulates M1A1 tank components and provides computer-controlled malfunctions which simulate various equipment faults in order to familiarize mechanics with the duties required to maintain the M1A1 tank systems.

Functional Description:
The M1A1 Tank X1100-3B Transmission (TRANS) Troubleshooting Trainer Panel is a freestanding, computer-based, simulation-type troubleshooting trainer. It consists of the following major components:

a. The Display Panel is an upright plane surface containing a combination of pictorials, controls, switches and displays that simulate M1A1 turret system components, controls, and displays.

b. The Computer System provides control of the simulated malfunction exercises/operating conditions and monitors the condition of system indicators and switches.

c. The Projector/Viewer Assembly allows the projection of visual slides in accordance with actions taken on the control console. The slides are pictures, messages, or a combination of both that provide information about components, malfunctions, tests, actions, and hazards.

d. The Terminal and Keyboard provide a communications interface with the computer.

e. The Control Console is used to control the operation of the system and monitor student performance. It is also used to apply power to the system, test the system, set the time standard, and introduce malfunction exercises into the system.

f. The Printer provides a printed record of student progress.

g. The Power Distribution Assembly provides control, distribution, and overload protection of ac and dc voltages for the trainer.

h. The Black Set Communicator is an externally connected device that provides a communications interface between the operator and trainer.

Physical Information:
120" L x 72" H x 29" D; 485 lbs

Equipment Required, Not Supplied:
None

Special Installation Requirements:
None

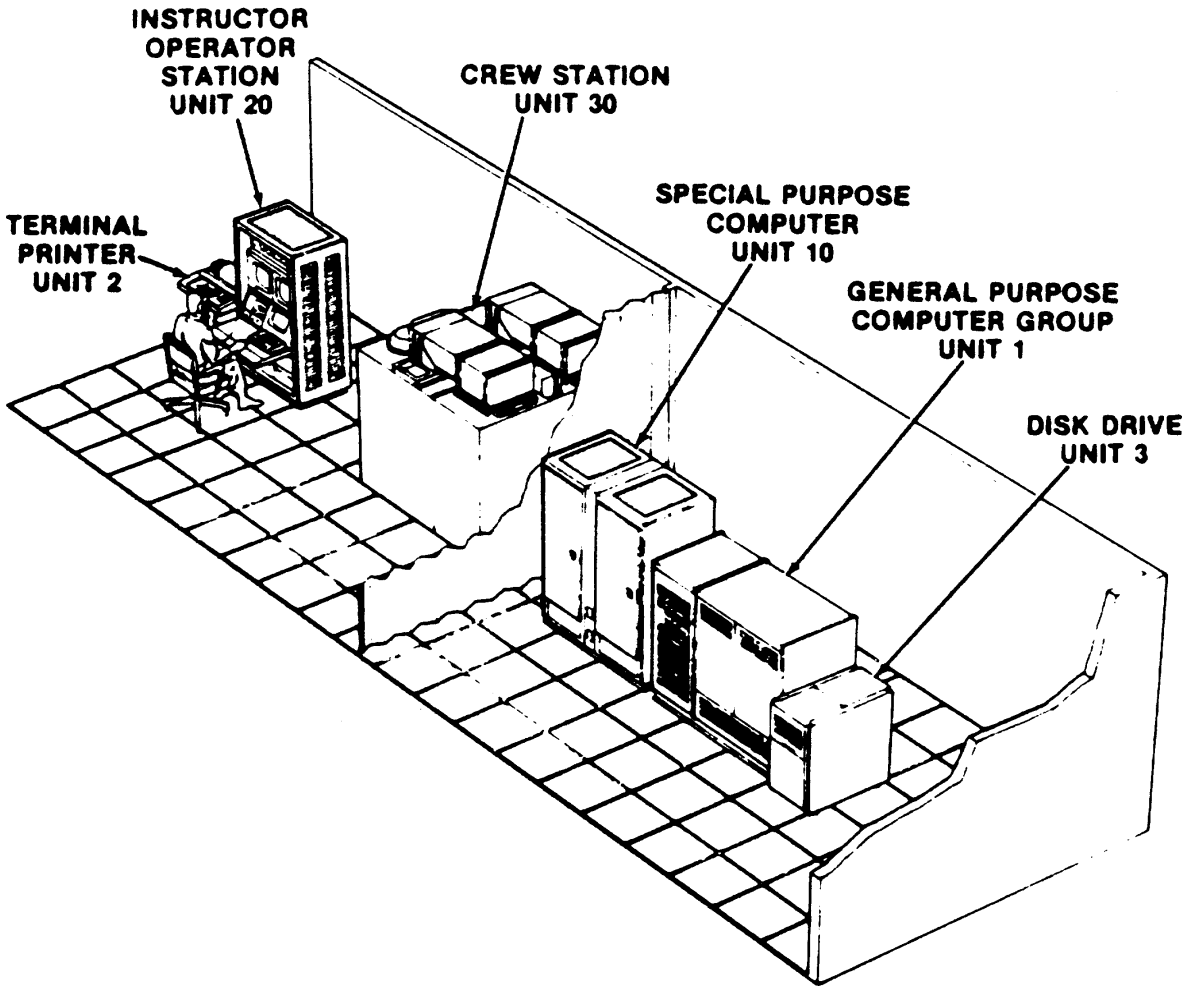
Power Requirements:
110 vac, 15 A, 50/60 Hz single-phase

Applicable Publications:
TD 9-6910-706-10
TD 9-6910-706-24&P

Reference Publications:
None

Training Requirements Supported:
MOSC 63H

BRADLEY FIGHTING VEHICLE UNIT CONDUCT OF FIRE TRAINER (M2/M3 U-COFT)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
Provides realistic training for the development of basic and advanced gunnery skills for the M2/M3 track commander and gunner.

Functional Description:
DVC 17-73 is a computer-controlled simulator. Two computers, one a general purpose (GPC) and the other, a special purpose (SPC), make up the trainer's visual simulation system. The output of the visual subsystem is a high resolution full color video/imagery that is viewed through sights and periscopes located in a replicated M2/M3 crew station. The color video provides simulation of tactical battle scenes consisting of a variety of terrain and manmade cultural features and a number of potential target types. An instructor operator station is located next to the crew station. Training is controlled and monitored from this console in consonance with computer-aided instruction techniques. Simulated adverse weather conditions, degraded fire control systems, and a combination of other factors normally encountered by an M2/M3 crew are integrated into the training program.

Physical Information:
Special Purpose Computer (SPC): 61" x 30" x 75"; 3500 lb
Instructor Operator Station. (IOS); 41" x 51" x 72"; 1041 lb
Ml Crew Station: 65" x 90" x 83"; 2700 lb
General Purpose Computer (GPC): 47" x 30" x 64"; 1200 lb
GPC EXP Cabinet: 26" x 30" x 64"; 600 lb
Disk Unit: 21" x 36" x 42"; 370 lb
Printer: 28" x 34" x 33"; 150 lb

Equipment Required, Not Supplied:
None

Special Installation Requirements:
The trainer must be installed in an enclosed, air conditioned building having an available vacant floor space of approximately 11 by 36 feet. Lighting and air conditioning control are pre-established building requirements.

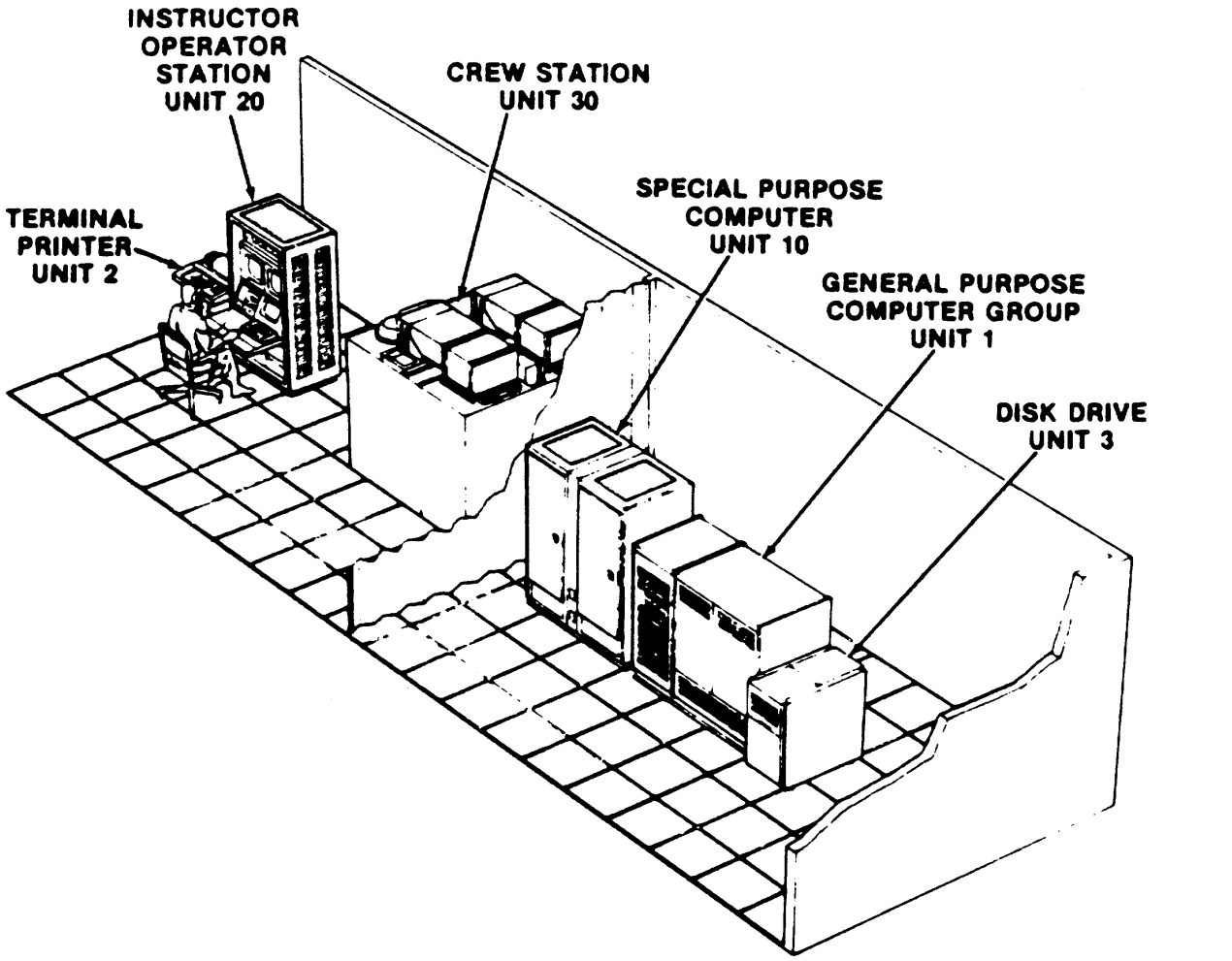
Power Requirements:
SPC: 120/208 vac, 50 A, 3 Phase, 11 KvA
IOS: 120/208 vac, 20A, 3 Phase, 4 KvA
GPC: 120/208 vac, 30 A, 3 Phase, 4 KvA
GPCEXP: 120 vac, 30 A, 1 Phase, N/A
Disk Unit: 120 vac, 11 A, 1 Phase, .77 KvA
Printer: 120 vac, 5 A, 1 Phase, .34 KvA
Miscellaneous: .03 KvA

Applicable Publications:
TM 9-6920-741-10
TM 9-6920-741-23
TM 9-6920-741-23-100
TM 9-6920-741-40
TM 9-6920-741-40-100
HB 17-12-M1

Reference Publications:
None

Training Requirements Supported:
MOSC 19K

BRADLEY FIGHTING VEHICLE INSTITUTIONAL CONDUCT OF FIRE TRAINER (M2A1/M3A I-COFT)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
Provides realistic training for the development of basic and advanced gunnery skills for the M2/M3 track commander and gunner.

Functional Description:
DVC 17-73 is a floor-mounted enhanced adaption of four Unit-Conduct of Fire Trainers (U-COFTs) and computer stations each of which provides basic, sustainment, transition and cross-training of critical crew tasks performed by the Bradley Fighting Vehicle gunners and vehicle commanders in a training institutional environment. The I-COFT adaptation tailors the basic U-COFT by deleting the shelter subsystems, by adding a software package developed to meet institutional training needs and by adding hardware which represents less than a 10% change in the hardware configuration. These additions include an Ethernet Controller that is also being added for the receipt, storage and transfer of the training records of individual gunners and vehicle commanders up to nine (9) I-COFT, i.e., thirty-six (36) U-COFT equivalents. I-COFT is a computer controlled simulator. Two computers, one a general purpose (GPC) and the other a special purpose (SPC), make up the trainer's visual simulation system. The output of the visual subsystem is a high resolution full color video imagery that is viewed through sights and periscopes located in a replicated M2/M3 crew station. The color video provides simulation of tactical battle scenes consisting of a

variety of terrain and manmade cultural features and a number of potential target types. An instructor operator station is located next to the crew station. Training is controlled and monitored from this console in consonance with computer aided instruction techniques. Simulated adverse weather conditions, degraded fire control systems, and a combination of other factors normally encountered by an M2/M3 crew are integrated into the training program.

Physical Information:

4-Special Purpose Computers: 61" x 30" x 75"; 3500 lb. ea.
4-Instructor Operator Stations: 41" x 51" x 72"; 1041 lb. ea.
4-Crew Stations: 65" x 90" x 83"; 2700 lb. ea.
4-General Purpose Computers: 47" x 30" x 54"; 1200 lb. ea.
4-GPC EXP Cabinets: 26" x 30" x 64"; 600 lb. ea.
4-Disk Units: 21" x 36" x 42"; 370 lb. ea.
4-Printers: 28" x 34" x 33"; 150 lb. ea.
Ethernet Connection

Equipment Required, Not Supplied:

None

Special Installation Requirements:

The trainer must be installed in an enclosed, air conditioned building having an available vacant floor space of approximately 11 by 36 feet. Lighting and air conditioning control are pre-established building requirements.

Power Requirements:

SPC: 120/208 vac, 50 A, 3 Phase, 11 KvA
IOS: 120/208 vac, 20A, 3 Phase, 4 KvA
GPC: 120/208 vac, 30 A, 3 Phase, 4 KvA
GPCEXP: 120 vac, 30 A, 1 Phase, N/A
Disk Unit: 120 vac, 11 A, 1 Phase, .77 KvA
Printer: 120 vac, 5 A, 1 Phase, .34 KvA
Miscellaneous: .03 KvA

Applicable Publications:

TM 9-6920-741-10
TM 9-6920-741-23
TM 9-6920-741-23-100
TM 9-6920-741-40
TM 9-6920-741-40-100
HB 17-12-M1

Reference Publications:

None

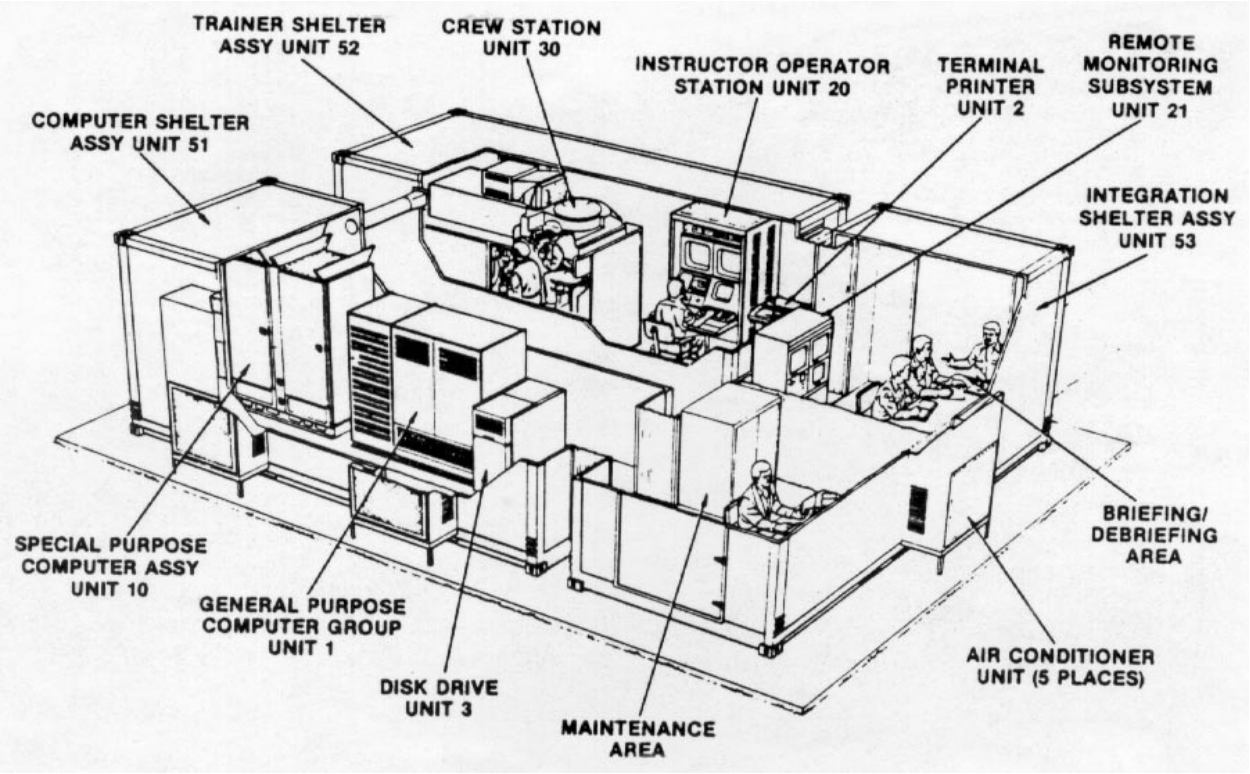
Training Requirements Supported:

MOSC 19K

BRADLEY FIGHTING VEHICLE UNIT CONDUCT OF FIRE TRAINER (SHELTERED)

NSN 6920-01-158-6756 (60Hz) **DVC 17-74 (M2/M3 U-COFT SHELTERED)**
NSN 6920-01-158-6757 (50Hz)

NSN 6920-01-158-6756 (60Hz) **DVC 17-74A (M2A1/M3A1 U-COFT SHELTERED)**



Training Category/Level Utilized:
Armor/ Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
Provides realistic training for the development of basic and advanced gunnery skills for the M2/M3 track commander and gunner.

Functional Description:
DVC 17-74 is a computer-controlled simulator. Two computers, one a general purpose (GPC) and the other, a special purpose (SPC), make up the trainer's visual simulation system. The output of the visual subsystem is a high resolution full color video/imagery that is viewed through sights and periscopes located in a replicated M2/M3 crew station. The color video provides simulation of tactical battle scenes consisting of a variety of terrain and manmade cultural features and a number of potential target types. An instructor operator station is located next to the crew station. Training is controlled and monitored from this console in consonance with computer-aided instruction techniques. Simulated adverse weather conditions, degraded fire control systems, and a combination of other factors normally encountered by an M2/M3 crew are integrated into the training program. DVC 17-74 is housed in three environmentally-controlled shelters that provide limited mobility and self-contained operation. The Computer Shelter contains the GPC, SPC, Disk Drive, and 3 air conditioners. The Trainer Shelter contains the Crew Station, IOS, Terminal Printer, and 1 air conditioner. The Integration Shelter contains the Remote Monitors, Maintenance Area, Debriefing Area, and 1 air conditioner.

Physical Information:
Computer Shelter: 238.5" x 96" x 96"; 12,000 lb
Trainer Shelter: 238.5" x 96" x 96"; 9,000 lb
Integration Shelter: 238.5" x 96" x 96"; 7,000 lb

Equipment Required, Not Supplied:

None

Special Installation Requirements:

The Government provides a clear and level site to specified drainage and compactness, and also electrical and telephone lines. The site must be a minimum of 40' x 38'. When multiple adjacent installations are planned at the same location, the size of each site may be 40' x 32'. The contractor provides a concrete pad and the electrical interface from the power source. In CONUS and where 60Hz power is available at OCONUS sites, the contractor provides an electrical distribution center and isloation transformer as the interface between the power source and the trainer. Where only 50Hz power is available, the contractor installs a transformer. and electrical distribution center or an electrical service center which encompasses both.

Power Requirements:

120/208 vac, 3-phase, 50/60 Hz, 4 wire. Maximum peak power is 125 KvA, including 20% design reserve.

Applicable Publications:

TM 9-6920-737-10 Operator's Manual
TM 9-6920-737-23 Maintenance, Organizational and Direct Support
TM 9-6920-737-23-100 Drawings and Parts List
TM 9-6920-737-40 Maintenance, General Support
TM 9-6920-737-40-100 Drawings and Parts List
TM 55-6920-737-15 Transportability Instructor's Handbook

Reference Publications:

TM 9-2350-252-10-1
TM 9-2350-252-10-2
TM 9-2350-252-10-3

Training Requirements Supported:

MOSC 11M (M2 BFV)
MOSC 19D (M3 BFV)

M2A1/M3A1 BRADLEY FIGHTING VEHICLE TURRET HANDS-ON TRAINER (HOT)

Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
ACALA

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
Used to simulate normal and malfunction operating conditions associated with the operational M2A1/M3A1 vehicles. Trains operational, troubleshooting, repair, and alignment skills required for proper maintenance of the vehicle.

Functional Description:
DVC 17-78 is a computer-controlled, three-dimensional, rotating simulation of an M2A1/M3A1 turret. An Instructor Station is mounted on the rotating platform. The turret is supported by a stand that also contains the hull entrance way. Students work inside the trainer while being directed by the instructor and observed from the viewing platform. They are required to recognize and test normal and malfunction operating conditions. Students troubleshoot, adjust, remove, replace, install, and repair system components as applicable. The trainer enables students to view normal and malfunction scenes via a simulated gunner's eyepiece. Students also manually and electrically operate the turret traversing system, the TOW lift actuator, the TOW rotor, and the 25mm weapons rotor.

Physical Information:
109" x 198" x 278"; 13,960 lb

Equipment Required, Not Supplied:
None

Special Installation Requirements:
Minimum Classroom ceiling height: 14'

Power Requirements:
120 vac, 60 Hz, 15 A, single-phase

Applicable Publications:
TM 9-6910-241-10

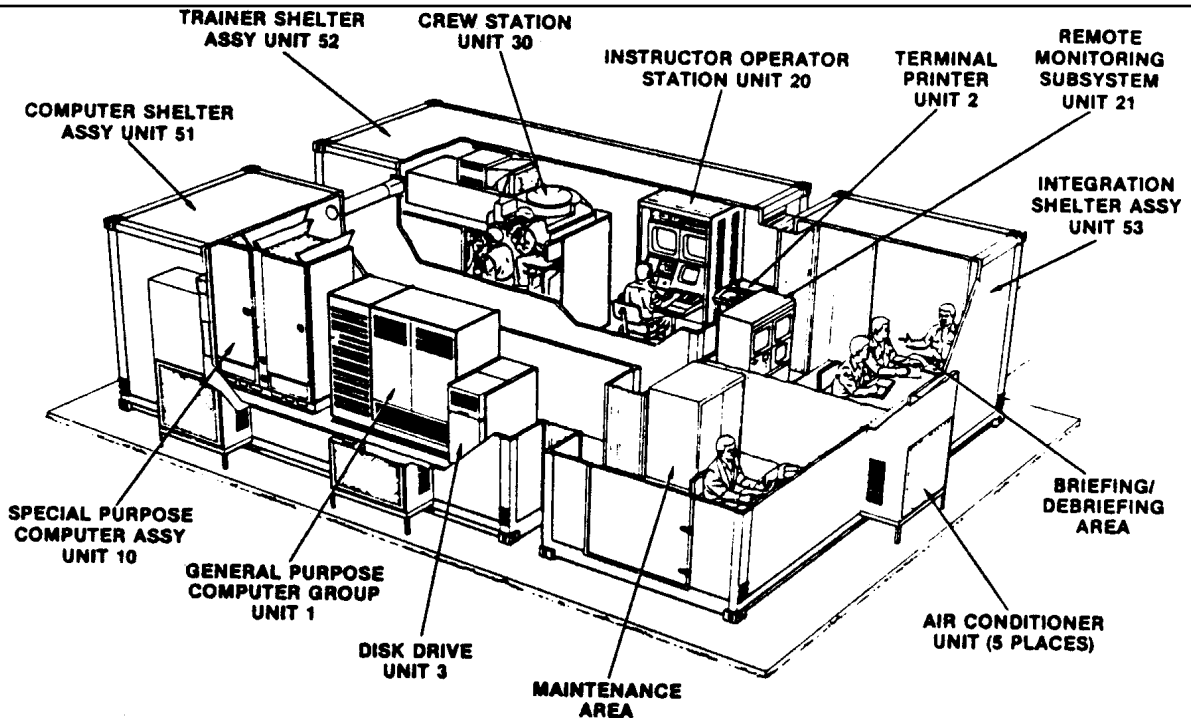
Reference Publications:

TM 9-2350-252-10-2
TM 9-2350-252-10-2-1
TM 9-2350-252-10-2-2
TM 9-2350-252-10-2-3
TM 9-1240-399-34
TM 9-1425-453-43
TM 9-4910-751-14-1

Training Requirements Supported:

MOSC 27E
MOSC 45T
MOSC 45K

M1A1 TANK UNIT CONDUCT OF FIRE TRAINER (SHELTERED) (M1A1 U-COFT SHELTERED)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
Provides realistic training for the development of basic and advanced gunnery skills for the M1A1 Abrams tank commander and gunner.

Functional Description:
DVC 17-127 is a computer-controlled simulator. Two computers, one a general purpose (GPC) and the other, a special purpose (SPC), make up the trainer's visual simulation system. The output of the visual subsystem is a high resolution full color video/imagery that is viewed through sights and periscopes located in a replicated M1A1 crew station. The color video provides simulation of tactical battle scenes consisting of a variety of terrain and manmade cultural features and a number of potential target types. An Instructor Operator station is located next to the crew station. Training is controlled and monitored from this console in consonance with computer-aided instruction techniques. Simulated adverse weather conditions, degraded fire control systems, and a combination of other factors normally encountered by an M1A1 crew are integrated into the training program. DVC 17-127 is housed in three environmentally-controlled shelters that provide limited mobility and self-contained operation. The Computer Shelter contains the GPC, SPC, Disk Drive, and 3 air conditioners. The Trainer Shelter contains the Crew Station, IOS, Terminal Printer, and 1 air conditioner. The Integration Shelter contains the Remote Monitors, Maintenance Area, Debriefing Area, and 1 air conditioner.

Physical Information:
Computer Shelter: 238.5" x 96" x 96"; 12,000 lb
Trainer Shelter: 238.5" x 96" x 96"; 9,000 lb
Integration Shelter: 238.5" x 96" x 96"; 7,000 lb

Equipment Required, Not Supplied:
None

Special Installation Requirements:
The Government provides a clear and level site to specified drainage and compactness, and also electrical and telephone lines. The site must be a minimum of 40' x 38'. When multiple adjacent installations are planned at the same location, the size of each site may be 40' x 32'. The contractor provides a concrete pad and the electrical interface from the power source. In CONUS and where 60Hz power is available at OCONUS sites, the contractor provides an electrical distribution center and isloation transformer as the interface between the power source and the trainer. Where only 50Hz power is

available, the contractor installs a transformer. and electrical distribution center or an electrical service center which encompasses both.

Power Requirements:

120/208 vac, 3-phase, 50/60 Hz, 4 wire. Maximum peak power is 125 KvA, including 20% design reserve.

Applicable Publications:

TM 9-6920-736-10 Operator's Manual
TM 9-6920-736-23 Maintenance, Organizational and Direct Support
TM 9-6920-736-23-100 Drawings and Parts List
TM 9-6920-736-40 Maintenance General Support
TM 9-6920-736-40-100 Drawings and Parts List
TM 55-6920-736-15 Transportability Instructor's Handbook

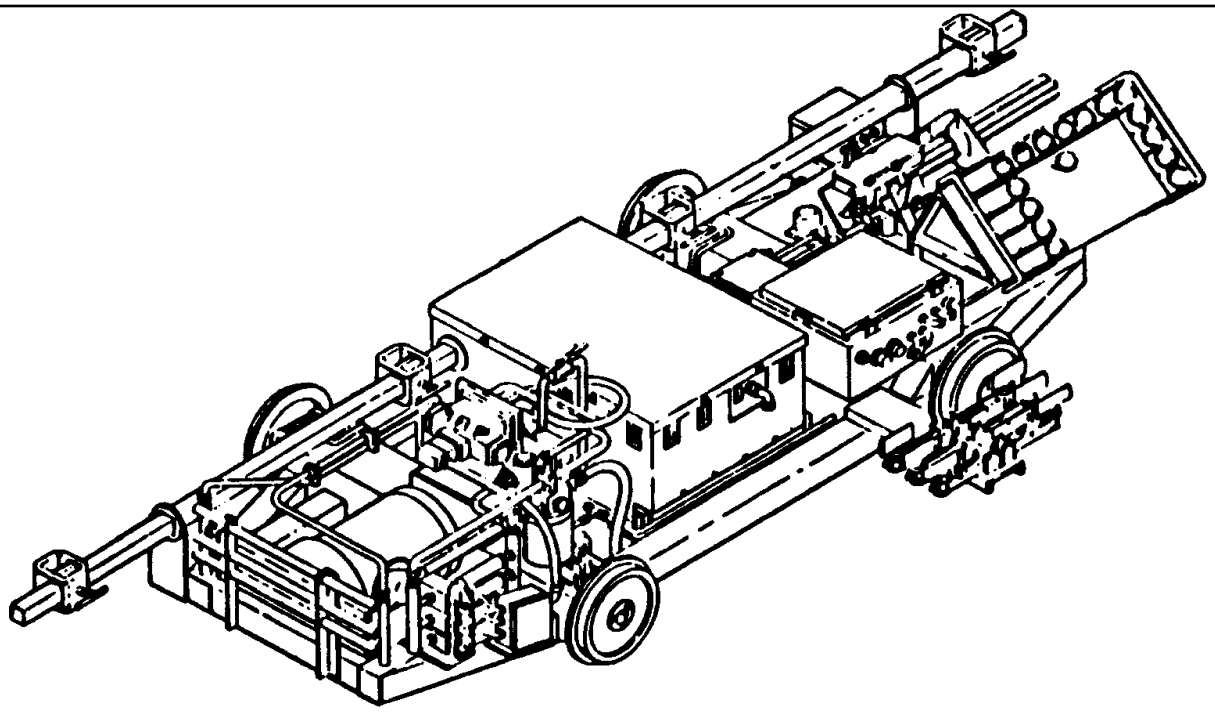
Reference Publications:

TM 9-2350-255-10-1
TM 9-2350-255-10-2
TM 9-2350-255-10-3

Training Requirements Supported:

MOSC 19K

REMOTED TARGET SYSTEM (RETS) ARMOR MOVING TARGET CARRIER (AMTC)



Training Category/Level Utilized:
Armor/ Level 1

Logistic Responsible Command, Service, or Agency:
ACALA

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
The Armor Moving Target Carrier (AMTC) is a component of the Remoted Target System (RETS) DVC 09-24. AMTC realistically simulates a tank moving from one concealed position to another. In live fire marksmanship training and qualification programs, it provides training in detecting, identifying, and firing upon moving tank targets under combat conditions. It is also used to evaluate a tank crew's ability to lead and track moving targets accurately, and to adjust for weapon ballistics at various target distances.

Functional Description:
DVC 17-131 includes a carrier, track system, improved lift target elevating mechanism, Gunfire Simulator (GUFS) (DVC 17-133), and power and control devices.

a. Carrier. The carrier is a four-wheeled drive vehicle that runs on a 58" gauge dual steel track attached to steel cross ties. It is driven by a self-contained electro-hydraulic system.

b. Track. The track is made of 39 30-foot sections (approx. 350 meters). Sets of buss bars along one side furnish electrical power to the carrier. A derailer provides a means for safely stopping a runaway carrier.

c. Power and Distribution and Control Unit (PDCU). distributes power and control signals for operation of the improved lift target elevating mechanism (ILTEM) and simulators on the AMTC carrier. One unit is installed in a storage bunker at one end of the track. The other is installed on the carrier. This unit also detects conditions and transmits hit information from the impact of projectiles on the target, and up/down status of the target.

d. Improved Lift Target Elevating Mechanism (ILTEM). ILTEM raises and lowers the target on command.

e. Simulators. The Gunfire Simulator (GUFS) DVC 17-133 and visual hit indicator, which is part of the THMTG DVC 17-63 are mounted on the carrier. They give indications of hits.

Physical Information:
a. Carrier
Wheelbase: 94"
Overall Length: 134"
Weight-Unloaded: 1590 lb
Loaded: 2640 lb
Transmission: 4 speed hydraulic
b. AC Motor
Weight: 386 lb
Horsepower: 40
c. Hydraulic Motors (4)
Weight: 19 lb
Horsepower: 8

d. Hydraulic Pump
Weight: 230 lb
e. PDCU
5" H x 13.5" W x 12" D; 15 lb
f. Carrier
5" H x 13.5" W x 12" D; 25 lb
g. ILTEM
18.5" H x 29.56" W x 39.56" D; 540 lb

Equipment Required, Not Supplied:
None

Special Installation Requirements:
Installed on RETS ranges, with range safety considered

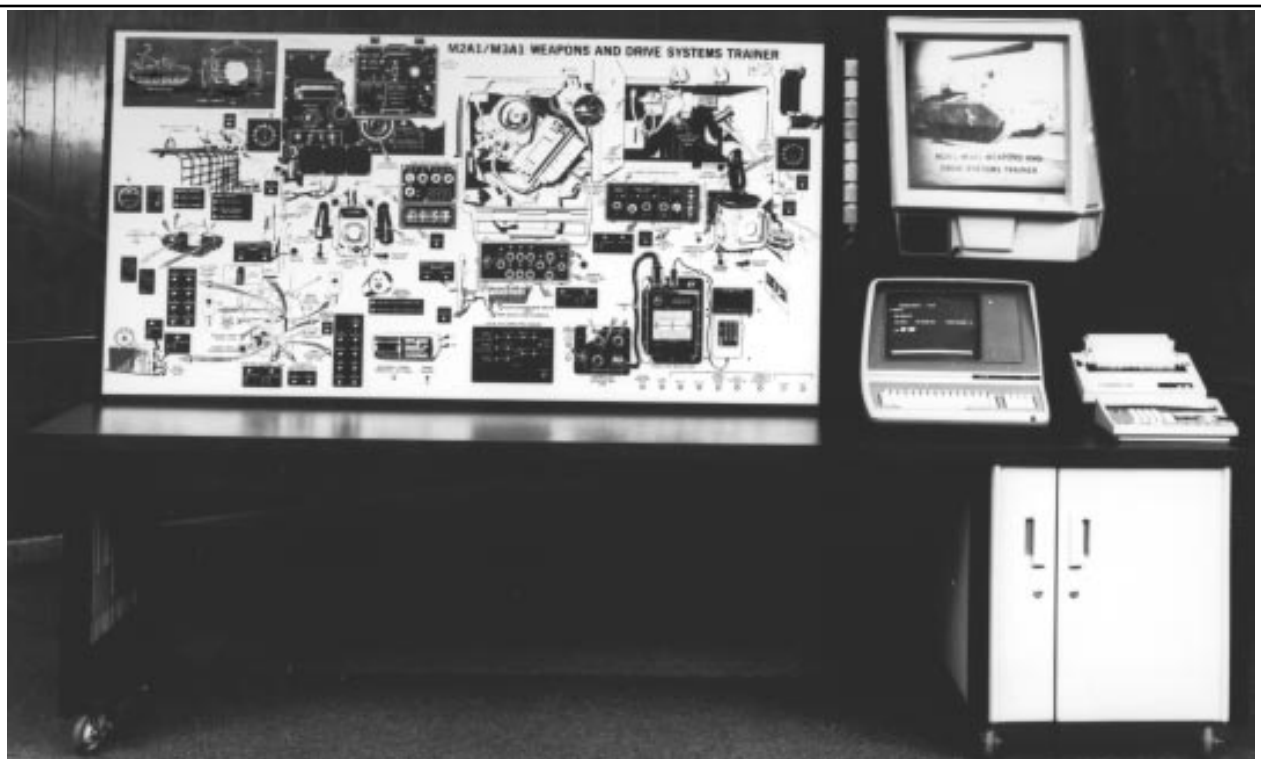
Power Requirements:
Carrier: 480 vac, 3-phase, 290 A per phase start-up current
AC Motor: 480 vac, 3-phase, 1800 rpm
PDCU: 120 vac
ILTEM: 240 vac

Applicable Publications:
TM 9-6920-742-14-6 (Vol 1 & 2)
TM 9-6920-742-24P-6

Reference Publications:
TM 9-6920-742-10

Training Requirements Supported:
Armor MOSC's

M2A1/M3A1 BRADLEY FIGHTING VEHICLE ORGANIZATIONAL MAINTENANCE TRAINER FOR WEAPONS AND DRIVE SYSTEMS



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
Simulates normal and malfunction operating conditions associated with the operational M2A1/M3A1 vehicles. Trains operational, troubleshooting, repair and alignment skills required for proper maintenance on the vehicle.

Functional Description:
DVC 17-132/1 consists of a console-mounted display panel, CRT terminal, printer, visual projection system, and a programmable computer. The display panel contains graphic representations of trainer components and are arranged in the same manner as the actual equipment. All simulated controls and indicators are functional and operable by the trainee. When activated, the controls and indicators will cause associated responses depending upon the mode of training selected. Through the use of mode, condition control, and component switches, the trainer simulates normal and malfunction operating conditions. The trainee is required to troubleshoot and test these conditions using the appropriate technical manuals. The instructor may enter malfunctions and monitor student progress. The student record is maintained and updated and a performance printout is generated.

Physical Information:
120" L x 29" W x 71" H; 485 lb

Equipment Required, Not Supplied:
None

Special Installation Requirements:
Minimum classroom ceiling height: 8'

Power Requirements:
115 vac, 60 Hz, 15 A, single-phase
220 vac, 50 Hz, 8 A, single-phase

Applicable Publications:
TM 9-6910-237-10

Reference Publications:

TM 9-4910-751-14-l
FM 21-11
DA PAM 738-750
TM 9-2350-252-10-2
TM 9-2350-252-20-2-1

Training Requirements Supported:

MOSC 45T

M2A1/M3A1 BRADLEY FIGHTING VEHICLE ORGANIZATIONAL MAINTENANCE TRAINER FOR TOW MISSILE AND ISU SYSTEMS

Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
Simulates normal and malfunction operating conditions associated with the operational M2A1/M3A1 TOW and Integrated Sight Unit (ISU) vehicles. Trains operational, troubleshooting, repair, and alignment skills required for proper maintenance on the vehicles.

Functional Description:
DVC 17-132/2 consists of a console-mounted display panel, CRT terminal, printer, visual projection system, and a programmable computer. The display panel contains graphic representations of trainer components and are arranged in the same manner as the actual equipment. All simulated controls and indicators are functional and operable by the trainee. When activated, the controls and indicators will cause associated responses depending upon the mode of training selected. Through the use of mode, condition control, and component switches, the trainer simulates normal and malfunction operating conditions. The trainee is required to troubleshoot and test these conditions using the appropriate technical manuals. The instructor may enter malfunctions and monitor student progress. The student record is maintained and updated and a performance printout is generated.

Physical Information:
120" L x 29" W x 71" H; 485 lb

Equipment Required, Not Supplied:
None

Special Installation Requirements:
Minimum classroom ceiling height: 8'

Power Requirements:
115 vac, 60 Hz, 15 A, single-phase
220 vac, 50 Hz, 8 A, single-phase

Applicable Publications:
TM 9-6910-238-10

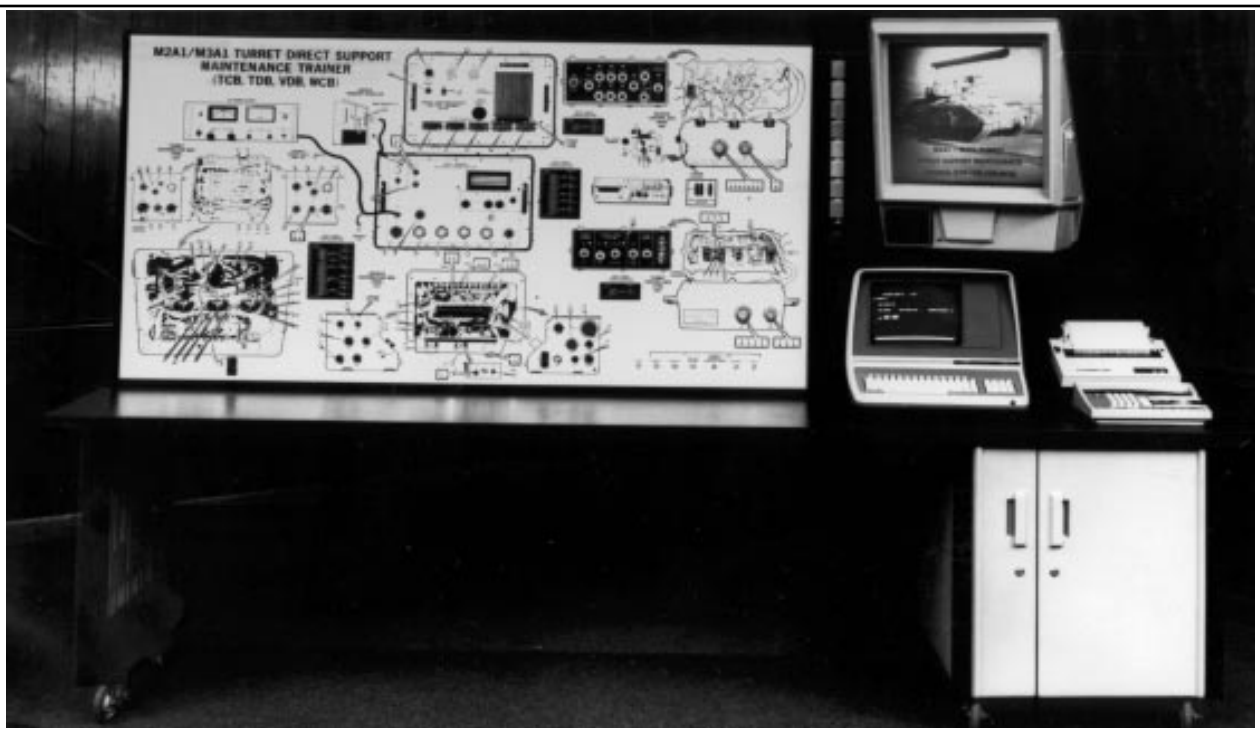
Reference Publications:

TM 9-4910-751-14-1
FM 21-11
DA PAM 738-750
TM 9-2350-252-10-2
TM 9-2350-252-20-2-1

Training Requirements Supported:

MOSC 45T

M2A1/M3A1 BRADLEY FIGHTING VEHICLE TURRET DIRECT SUPPORT MAINTENANCE TRAINER: TURRET CONTROL BOX, TURRET DISTRIBUTION BOX, VEHICLE DISTRIBUTION BOX, WEAPONS CONTROL BOX (TCB, TDB, VDB, WCB)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
Simulates normal and malfunction operating conditions regarding the M2A1/M3A1 turrets. Trains operational, troubleshooting, repair, and alignment skills required for proper maintenance on the vehicle.

Functional Description:
DVC 17-132/3 consists of a console-mounted display panel, CRT terminal, printer, visual projection system, and a programmable computer. The display panel contains graphic representations of trainer components and are arranged in the same manner as the actual equipment. All simulated controls and indicators are functional and operable by the trainee. When activated, the controls and indicators will cause associated responses depending upon the mode of training selected. Through the use of mode, condition control, and component switches, the trainer simulates normal and malfunction operating conditions. The trainee is required to troubleshoot and test these conditions using the appropriate technical manuals. The instructor may enter malfunctions and monitor student progress. The student record is maintained and updated and a performance printout is generated.

Physical Information:
120" L x 29" W x 71" H; 485 lb

Equipment Required, Not Supplied:
None

Special Installation Requirements:
Minimum classroom ceiling height: 8'

Power Requirements:
115 vac, 60 Hz, 15 A, single-phase
220 vac, 50 Hz, 8 A single-phase

Applicable Publications:
TM 9-6910-239-10

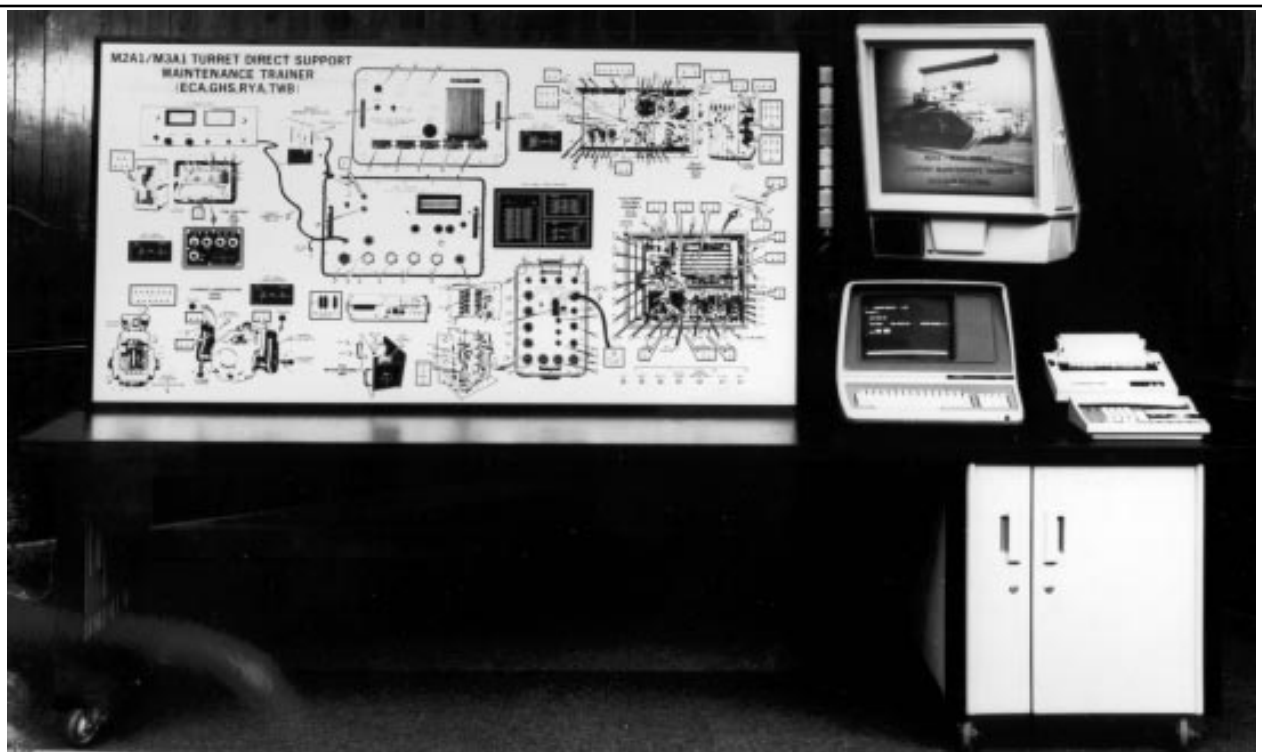
Reference Publications:

TM 9-4910-751-14-1
FM 21-11
DA PAM 731-750
TM 9-2350-252-10-2
TM 9-2350-252-20-2-1

Training Requirements Supported:

MOSC 45K

M2A1/M3A1 BRADLEY FIGHTING VEHICLE TURRET DIRECT SUPPORT MAINTENANCE TRAINER: ELECTRONIC CONTROL ASSEMBLY, GUNNER'S HANDSTATION, RELAY ASSEMBLY, TOW CONTROL BOX (ECA, GHS, RYA, TWB)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
Simulates normal and malfunction operating conditions associated with the ECA, GHS, RYA, and TWB. Trains operational, troubleshooting, repair, and alignment skills required for proper maintenance on the vehicle.

Functional Description:
DVC 17-132/4 consists of a console-mounted display panel, CRT terminal, printer, visual projection system, and a programmable computer. The display panel contains graphic representations of trainer components and are arranged in the same manner as the actual equipment. All simulated controls and indicators are functional and operable by the trainee. When activated, the controls and indicators will cause associated responses depending upon the mode of training selected. Through the use of mode, condition control, and component switches, the trainer simulates normal and malfunction operating conditions. The trainee is required to troubleshoot and test these conditions using the appropriate technical manuals. The instructor may enter malfunctions and monitor student progress. The student record is maintained and updated and a performance printout is generated.

Physical Information:
120" L x 29" W x 71" H; 485 lb

Equipment Required, Not Supplied:
None

Special Installation Requirements:
Minimum classroom ceiling height: 8'

Power Requirements:
115 vac, 60 Hz, 15 A, single-phase
220 vac, 50 Hz, 8 a single-phase

Applicable Publications:
TM 9-6910-239-10

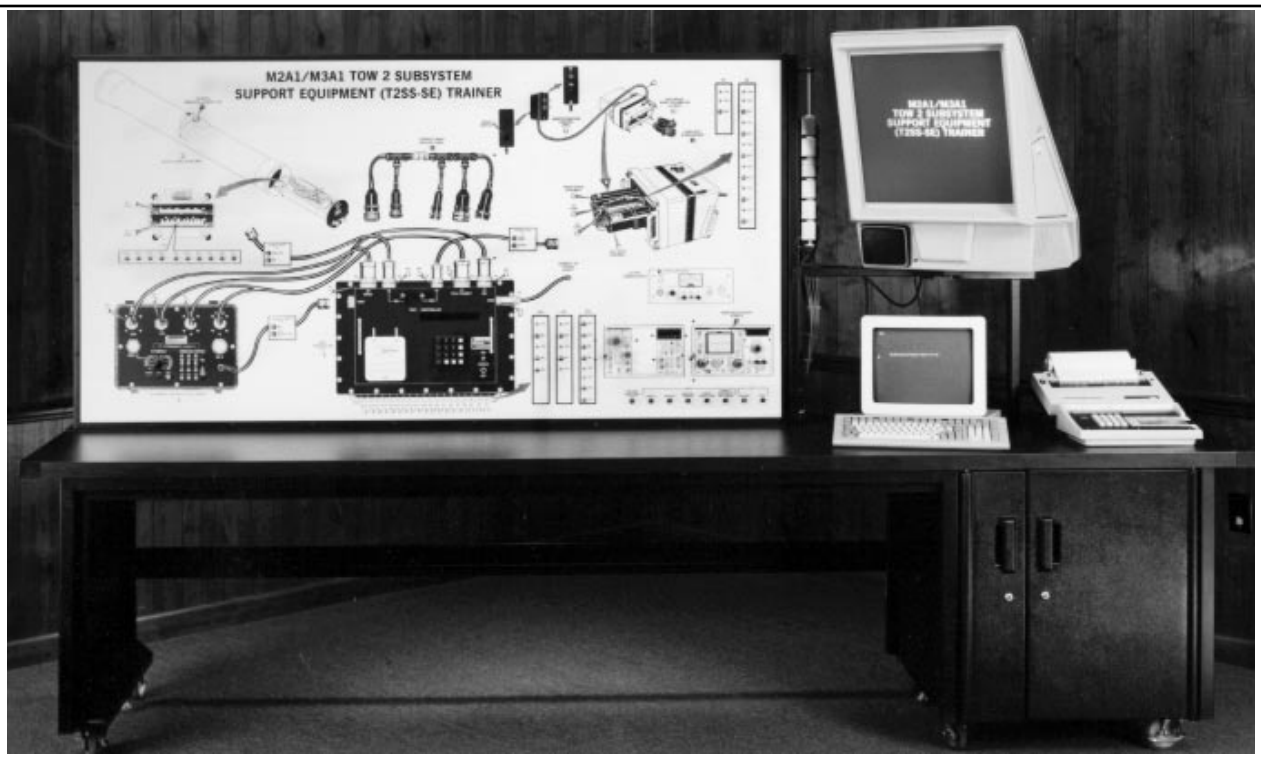
Reference Publications:

TM 9-4910-751-14-1
FM 21-11
DA PAM 731-750
TM 9-2350-252-10-2
TM 9-2350-252-20-2-1

Training Requirements Supported:

MOSC 45K

M2A2/M3A2 BRADLEY FIGHTING VEHICLE TOW-2 SUBSYSTEM SUPPORT EQUIPMENT (T2SS-SE) TRAINER



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
Simulates normal and malfunction operating conditions associated with the operational M2A2/M3A2 TOW-2 subsystem vehicles. Trains operational, troubleshooting, repair, and alignment skills required for proper maintenance on the vehicle.

Functional Description:
DVC 17-132/5 consists of a console-mounted display panel, CRT terminal, printer, visual projection system, and a programmable computer. The trainer display panel contains graphic representations of trainer components and are arranged in the same manner as the actual equipment. All simulated controls and indicators are functional and operable by the trainee. When activated, the controls and indicators will cause associated responses depending upon the mode of training selected. Through the use of mode, condition control, and component switches, the trainer simulates normal and malfunction operating conditions. The trainee is required to troubleshoot and test these conditions using the appropriate technical manuals. The instructor may enter malfunctions and monitor student progress. The student record is maintained and updated and a performance printout is generated.

Physical Information:
120" L x 29" W x 71" H; 364 lb

Equipment Required, Not Supplied:
None

Special Installation Requirements:
Minimum classroom ceiling height: 8'

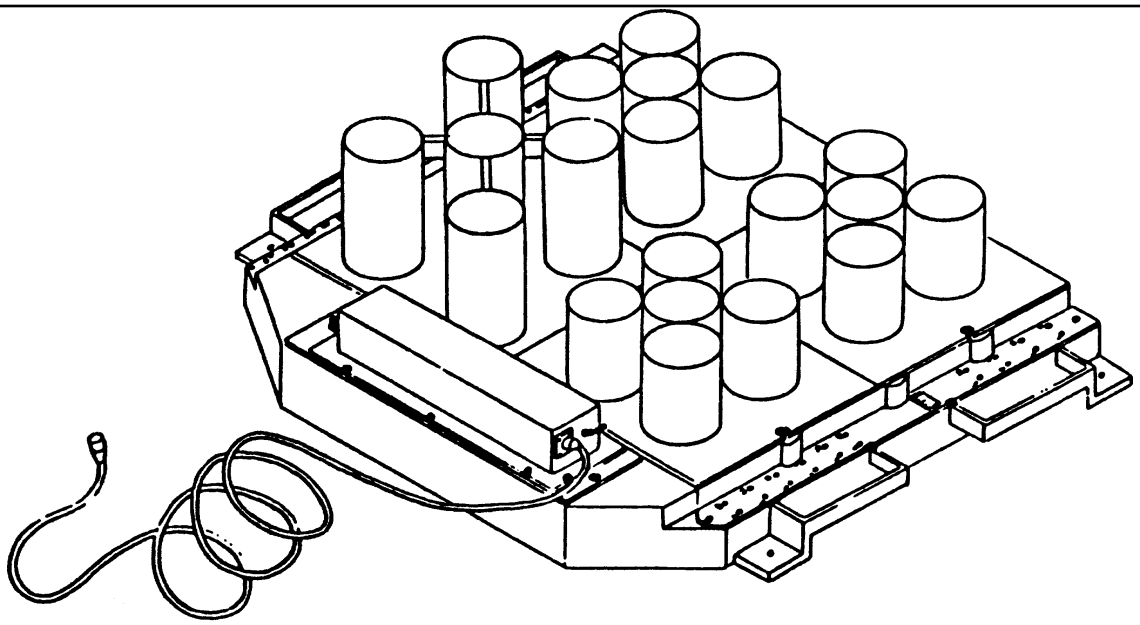
Power Requirements:
120 vac, 60 Hz, 15 A, single-phase

Applicable Publications:
TD 17-6910-701-10

Reference Publications:
TM 9-4935-474-14-2

Training Requirements Supported:
MOSC 27E

REMOTED TARGET SYSTEM (RETS) GUNFIRE SIMULATOR (GUFS)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
ACALA

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
The Gunfire Simulator (GUFS) is a component of the Remoted Target System (RETS) DVC 09-24. GUFS simulates tank gunfire at a distant target, tank gunfire hitting an armor target, and a burning target in both day and night exercises. It may be used alone or in combination with the Target Holding Mechanism Tank Gunnery (THMTG) DVC 17-63 and/or Armor Moving Target Carrier (AMTC) DVC 17-131.

Functional Description:
DVC 17-133 consists of 20 vertical firing tubes mounted on a flat frame. When fitted with electronic circuitry, an external switch, and a power cable connected to a 12 vdc source, the device will fire any of three types of pyrotechnic cartridges to produce the desired ordnance effect. The 50mm M21, steel-on-steel, and smoke cartridges are used, either singly or in various combinations.

Physical Information:
30" W x 10" H x 26" L; 116 lb

Equipment Required, Not Supplied:
12 vdc battery

Special Installation Requirements:
Used on RETS firing ranges, with range safety considered

Power Requirements:
12 $\pm$1 vdc, 1.5 A, minimum duration .45 msec. Maximum ignition current 32 mW seconds/ohm

Applicable Publications:
TM 9-6920-742-14-2
TM 9-6920-742-24P-2

Reference Publications:
TM 9-6920-742-10
TM 9-6920-742-24&P

Training Requirements Supported:
Various MOSC's

M21 BLANK FIRING ATTACHMENT FOR M240 MACHINE GUN

Training Category/Level Utilized:
Armor/Level 3

Logistic Responsible Command, Service, or Agency:
ACALA

Source and Method of Obtaining:
Available through local TSC.

Purpose of Trainer:
The M21 Blank firing Attachment permits the firing of linked blank 7.62mm ammunition in the M240 Machine Gun. This allows simulation of live round firing in tactical engagement exercises to support tactical training.

Functional Description:
The M240 MG is gas operated, i.e.; gases behind the exiting bullet are bled off thru ports in the barrel and this back pressure is used to cycle the weapon for continuous firing. The orifice in the M21 BFA is designed to duplicate that action by restricting blank firing gases and creating back pressure that will provide a cyclic rate similar to the rates experienced using service ammunition.

The M21 Blank Firing Adapter for the M240 Machine Gun is designed to replace the Flash Hider on the weapon for training exercises. Of one-piece cast corrosion-resistant steel, the BFA design incorporates a specific sized orifice to restrict gases generated by blank firing just as a bullet passing thru the barrel and a parabolic chamber to enhance the aural signature of the weapon under blank firing conditions. Fins on the outer diameter of the BFA help dissipate heat buildup. The front end of the BFA is designed to accept installation of various extensions to insure expulsion of gases when the M240 MG/M21 BFA combination is used in the M60A1/A3 Tank, or Ml/M1A1 MBT.

Physical Information:
Weight: Approximately 3 lb. (Each component)

Equipment Required, Not Supplied:
None

Special Installation Requirements:
None

Power Requirements:
None

Applicable Publications:
TM 9-1005-316-12&P

Reference Publications:
TM 9-1005-313 Series

Training Requirements Supported:
MOSC 11B, 11M, 19D, 19E, 19K

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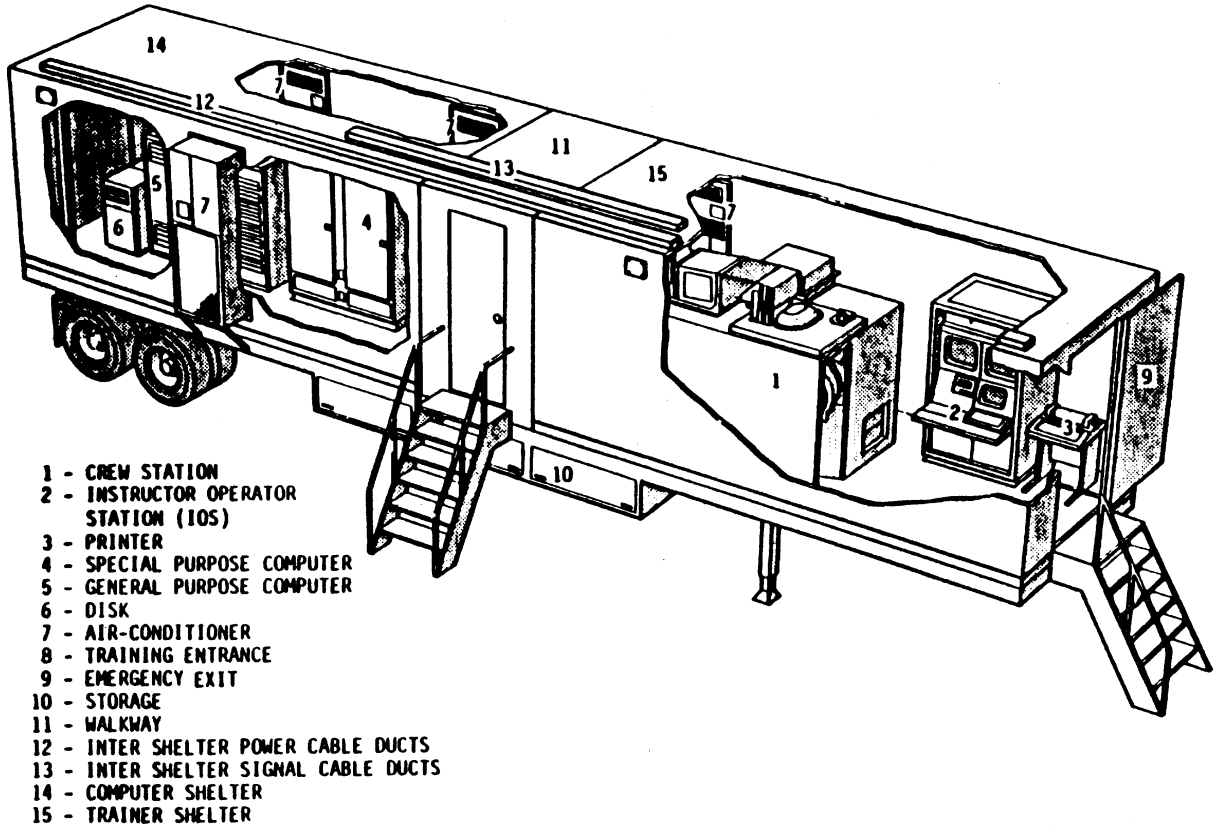
M1 TANK MOBILE CONDUCT OF FIRE TRAINER (M1 M-COFT)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To train the Gunner and Tank Commander on the Abrams Ml tank in organizational procedures, target acquisition, reticle aim, target engagement and system management.

Functional Description:
The M-COFT is used at the battalion level primarily to sustain gunnery proficiency of unit gunners and tank commanders (TC) between annual qualification periods. Each M-COFT consists of a crew compartment replication; a gunner station and a TC station; an instructor/operator station; a visual system; an aural/audio system; and a computer system. A computer generated image system provides visual presentations to the gunner and TC through the tank optical system. M-COFT has the ability to train in operational procedures, target acquisition, identification and engagement using either the primary or alternate fire control and sighting equipment. M-COFT provides a simulated battlefield environment with tank stabilized or unstabilized, stationary and moving, single and multiple arrays, day and night, and reduced visibility conditions. The instructor/operator stations allow monitoring of the gunner and TC fire control equipment and selection of the training to be conducted and provides a scoring system for evaluation of crew performance.

Physical Information:
45' L x 8' W x 13'6" H; approx. 40,000 lb

Equipment Required, Not Supplied:
None

Special Installation Requirements:
M-COFT is installed in two basic mobile facility shelters mounted on a 45-foot air-ride trailer. The Government provides a 30' x 60' concrete pad at each armory with electrical and telephone lines in accordance with an approved facility plan. The contractor provides an electrical distribution center at each site.

Power Requirements:

120/208 vac, 60 Hz, 3-phase, 4-wire

Maximum peak power is 125 KvA including 20% design reserve.

Applicable Publications:

TM 9-6920-744-10
TM 9-6920-760-10
TM 9-6920-744-15

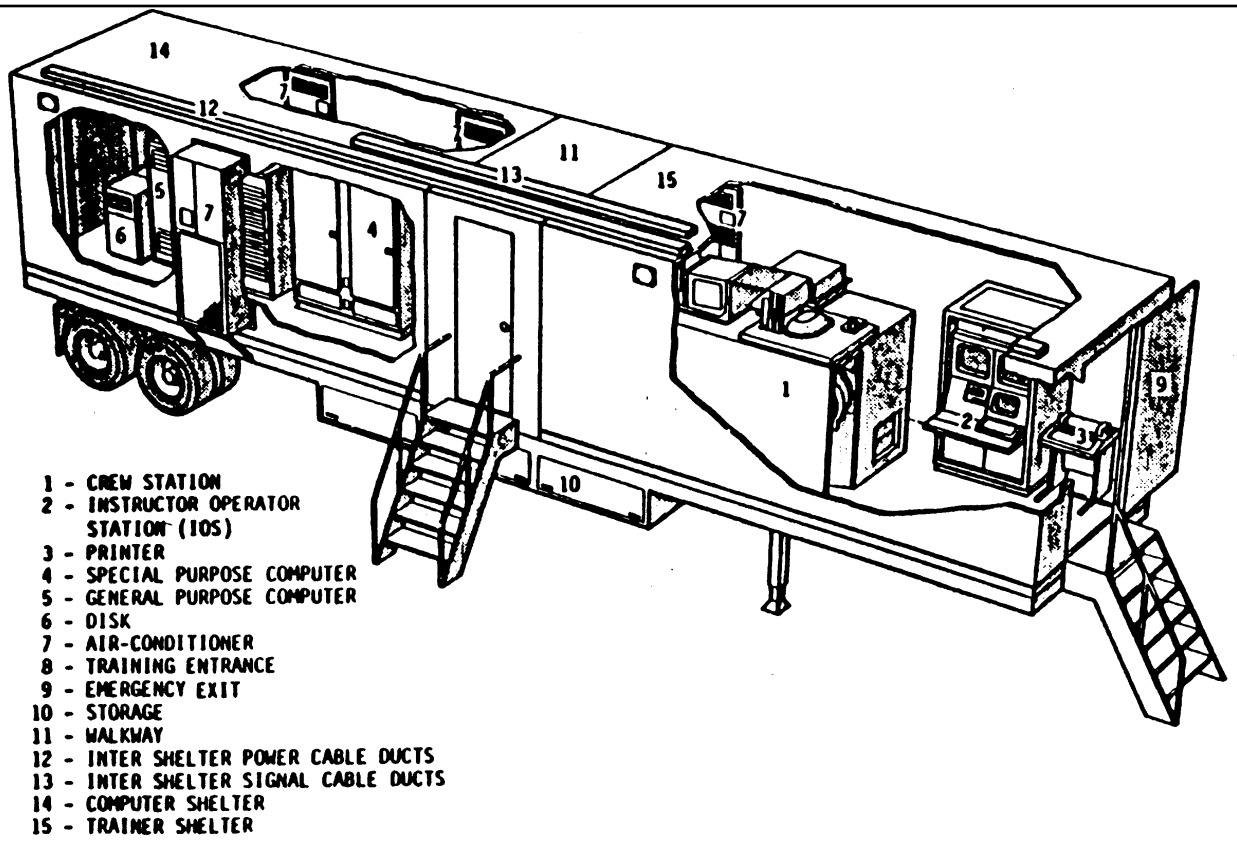
Reference Publications:

TM 9-6920-744-23
TM 9-6920-744 23-100
TM 9-6920-744-23-109

Training Requirements Supported:

MOSC 19K, 12-series

M2A1/M3A1 BRADLEY FIGHTING VEHICLE MOBILE CONDUCT OF FIRE TRAINER (M2A1/M3A1 M-COFT)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To train the Gunner and Track Commander on the Bradley Fighting Vehicle in organizational procedures, target acquisition, reticle aim, target engagement and system management.

Functional Description:
The M-COFT is used at the battalion level primarily to sustain gunnery proficiency of unit gunners and track commanders (TC) between annual qualification periods. Each M-COFT consists of a crew compartment replication; a gunner station and a TC station; an instructor/operator station; a visual system; an aural/audio system; and a computer system. A computer generated image system provides visual presentations to the gunner and TC through the vehicle Optical system. M-COFT has the ability to train in operational procedures, target acquisition, identification and engagement using either the primary or alternate fire control and sighting equipment. M-COFT provides a simulated battlefield environment with tank stabilized or unstabilized, stationary and moving, single and multiple arrays, day and night, and reduced visibility conditions. The instructor/operator stations allow monitoring of the gunner and TC fire control equipment and selection of the training to be conducted and provides a scoring system for evaluation of crew performance.

Physical Information:
45' L x 8' W x 13'6" H; approx. 40,000 lb

Equipment Required, Not Supplied:
None

Special Installation Requirements:
M-COFT is installed in two basic mobile facility shelters mounted on a 45-foot air-ride trailer. The Government provides a 30' x 60' concrete pad at each armory with electrical and telephone lines in accordance with an approved facility plan. The contractor provides an electrical distribution center at each site.

Power Requirements:

120/208 vac, 60 HZ, 3-phase, 4-wire

Maximum peak power is 125 KvA, including 20% design reserve.

Applicable Publications:

TM 9-6920-745-10
TM 9-6920-745-23
TM 9-6920-745-23-100

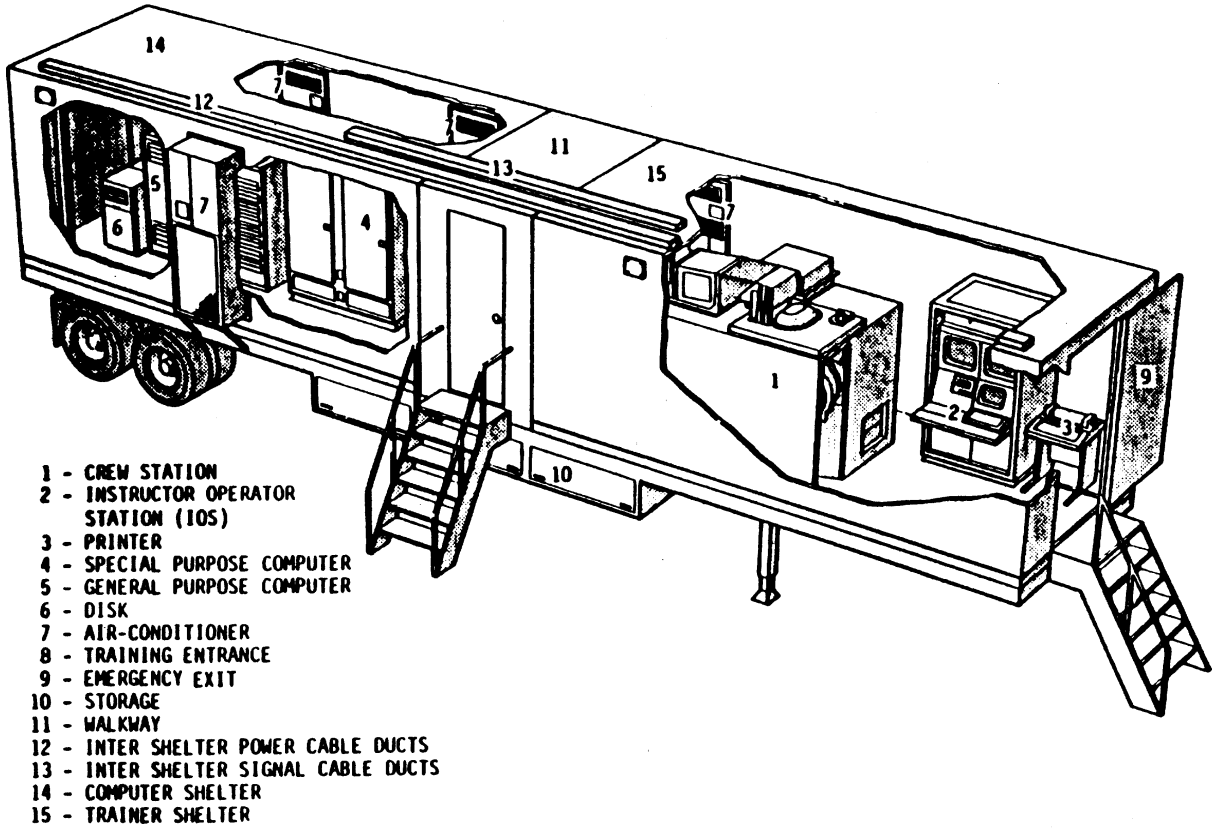
Reference Publications:

None

Training Requirements Supported:

MOSC 45K, 12-series

M1A1 TANK MOBILE CONDUCT OF FIRE TRAINER (M1A1 M-COFT)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To train the Gunner and Tank Commander on the Abrams M1A1 tank in organizational procedures, target acquisition, reticle aim, target engagement and system management.

Functional Description:
The M-COFT is used at the battalion level, primarily to sustain gunnery proficiency of unit gunners and tank commanders (TC) between annual qualification periods. Each M-COFT consists of a crew compartment replication; a gunner station and a TC station; an instructor/operator station; a visual system; an aural/audio system; and a computer system. A computer generated image system provides visual presentations to the gunner and TC through the tank optical system. M-COFT has the ability to train in operational procedures, target acquisition, identification and engagement using either the primary or alternate fire control and sighting equipment. M-COFT provides a simulated battlefield environment with tank stabilized or unstabilized, stationary and moving, single and multiple arrays, day and night, and reduced visibility conditions. The instructor/operator stations allow monitoring of the gunner and TC fire control equipment and selection of the training to be conducted and provides a scoring system for evaluation of crew performance.

Physical Information:
45' L x 8' W x 13'6" H; approx. 40,000 lb.

Equipment Required, Not Supplied:
None

Special Installation Requirements:

M-COFT is installed in two basic mobile facility shelters mounted on a 45-foot air-ride trailer. The Government provides a 30' x 60' concrete pad at each armory with electrical and telephone lines in accordance with an approved facility plan. The contractor provides an electrical distribution center at each site.

Power Requirements:

120/208 vac, 60 Hz, 3-phase, 4-wire

Maximum peak power is 125 KvA including 20% design reserve.

Applicable Publications:

TM 9-6920-718-10
TM 9-6920-744-15

Reference Publications:

TM 9-6920-744-23
TM 9-6920-744-23-100
TM 9-6920-744-23-109

Training Requirements Supported:

MOSC 19K, 12-series

M1/M1A1 TANK VIDEODISC GUNNERY SIMULATOR (M1/M1A1 VIGS)

Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To provide enhanced initial, intermediate, and advanced gunnery training for the M1/M1A1 tanks in a classroom setting.

Functional Description:
DVC 17-142 is a tabletop. four-man portable, target acquisition and tracking simulator. The trainer consists of the gunner's console, a videodisc player, and an optional instructor's monitor.

The videodisc player provides the student with progressively difficult battlefield missions in which targets are more difficult to hit. The instructor can select the missions. Scoring follows each mission and is displayed on the screen.

Physical Information:
Gunner's Console 27" H x 31" D x 23" W; 140 lb
Videodisc Player 43/4" H x 163/8" D X 171/8" W; 27.5 lb
Optional Item: Instructor's Monitor

Equipment Required, Not Supplied:
Combat vehicle crewman helmet, 1 each
3 KW generator, NSN 6115-00-017-8237 or equivalent, 1 each

Special Installation Requirements:
The trainer cannot be stored in an environment of extremes in heat and humidity for long periods of time. It must be placed in the classroom so that a seated student can easily see into the sight eyepiece.

Power Requirements:
120 vac, 60 Hz or
220 vac, 50 Hz

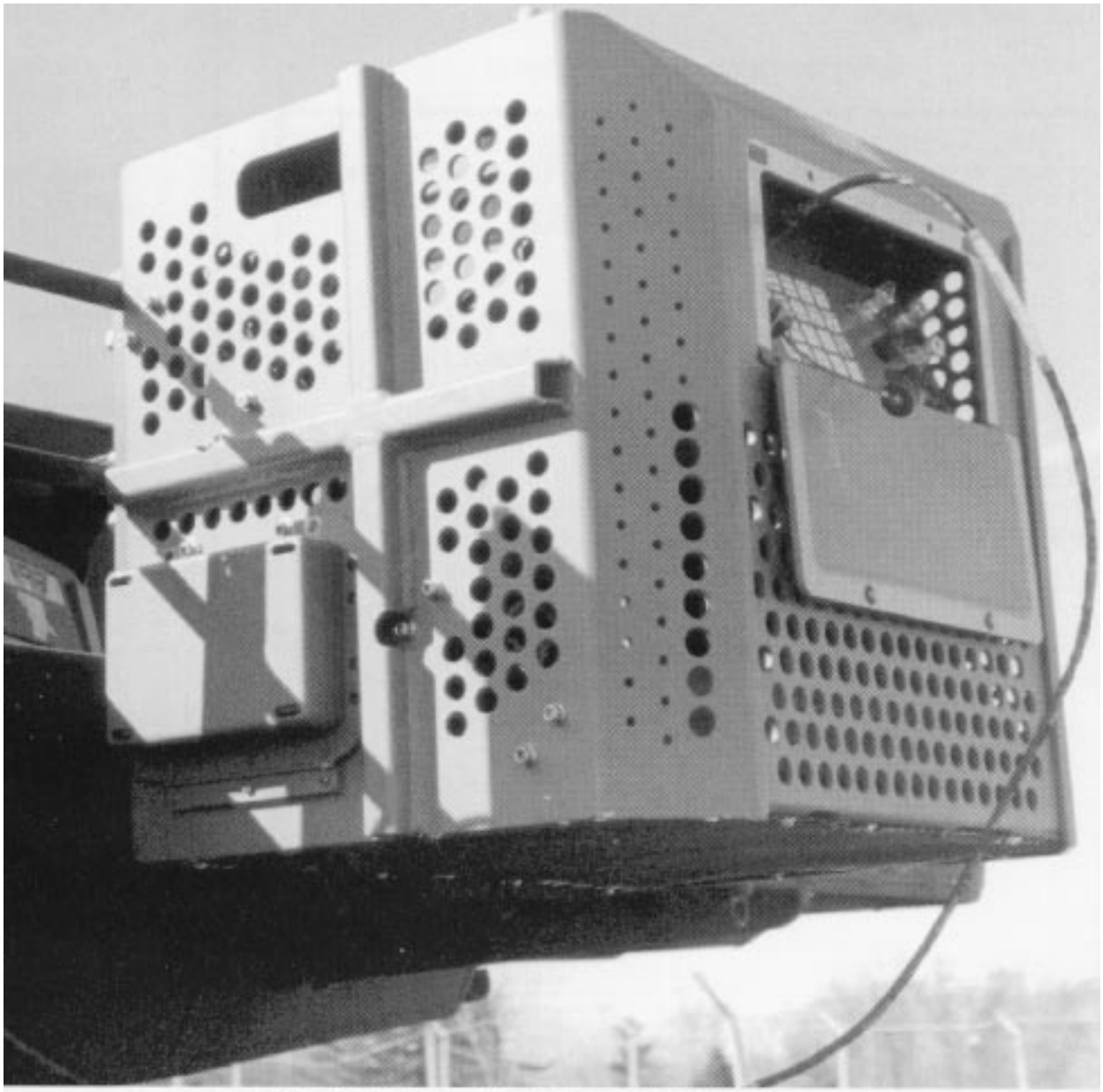
Applicable Publications:
TM 9-6920-750-12&P

Reference Publications:
None

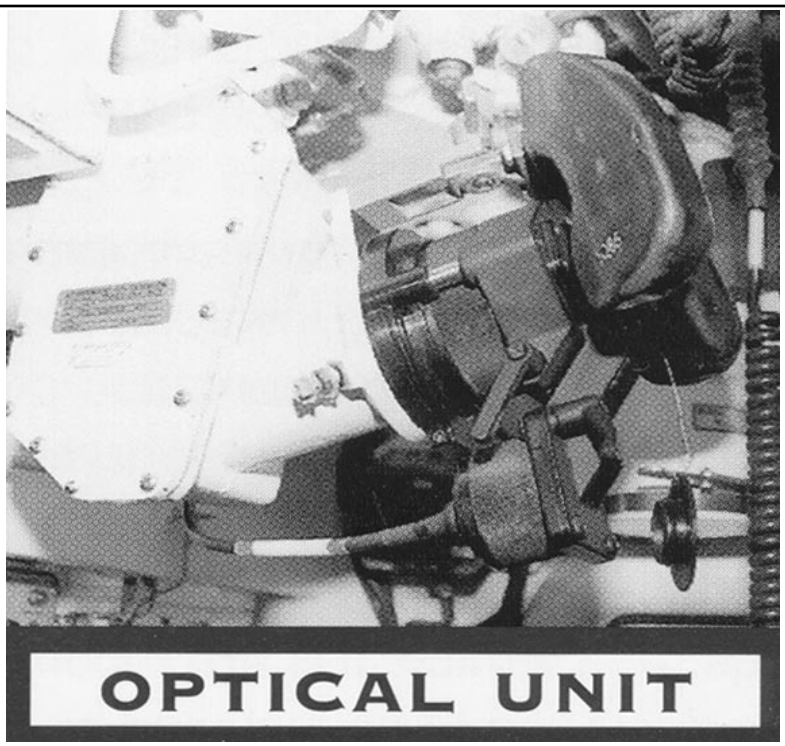
Training Requirements Supported:
MOSC 19K

THROUGH-SIGHT VIDEO (TSV) FOR M1A1 AND M1A2 MAIN BATTLE TANK AND M2/M3 BRADLEY FIGHTING VEHICLE

NSN Unknown	DVC 17-143
NSN Unknown	DVC 17-143/1 AUDIO AND VIDEO RECORDING (AVR) SUB- SYSTEM
NSN Unknown	DVC 17-143/2 ENVIRONMENTAL ENCLOSURE UNIT (EEU)
NSN Unknown	DVC 17-143/3 AFTER ACTION REVIEW (AAR) SUBSYSTEM



VEHICLE MOUNTED
ENVIRONMENTAL ENCLOSURE UNIT



Training Category/Level Utilized:
Armor/Level 3

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
Mounted on an M1, M2, or M3 series vehicle, the TSV will be used for unit gunnery and tactical training during the conduct of gunnery tables, force-on-force gunnery exercises, and during integrated field training exercises. The TSV system provides training at all proficiency levels as well as during simulated or live fire exercises.

Functional Description:
The TSV is a vehicle appended system that provides video and audio recording of gunnery or tactical engagement exercises in real-time. The TSV consists of two subsystems: The audio and video recording (AVR) subsystem (contained in transit cases one and two, DVCs 17-143/1 and 17-143/2) and the after action review (AAR) subsystem (transit case three, DVC 17-143/3). The AVR subsystem simultaneously records on video tape, the gunner's sight picture and the oral commands and responses of the crew during gunnery training exercises. The AAR subsystem is a stand-alone component of the TSV system that may be set up anywhere a 110/220 vac power source is available. It is used by crews, commanders, and training managers to review gunnery engagement video tapes generated by AVR subsystem.

Physical Information:
Information not available.

Equipment Required, Not Supplied:
M1A1 Main Battle Tank
M1A2 Main Battle Tank
M2/M3 Bradley Fighting Vehicle

Special Installation Requirements:
None

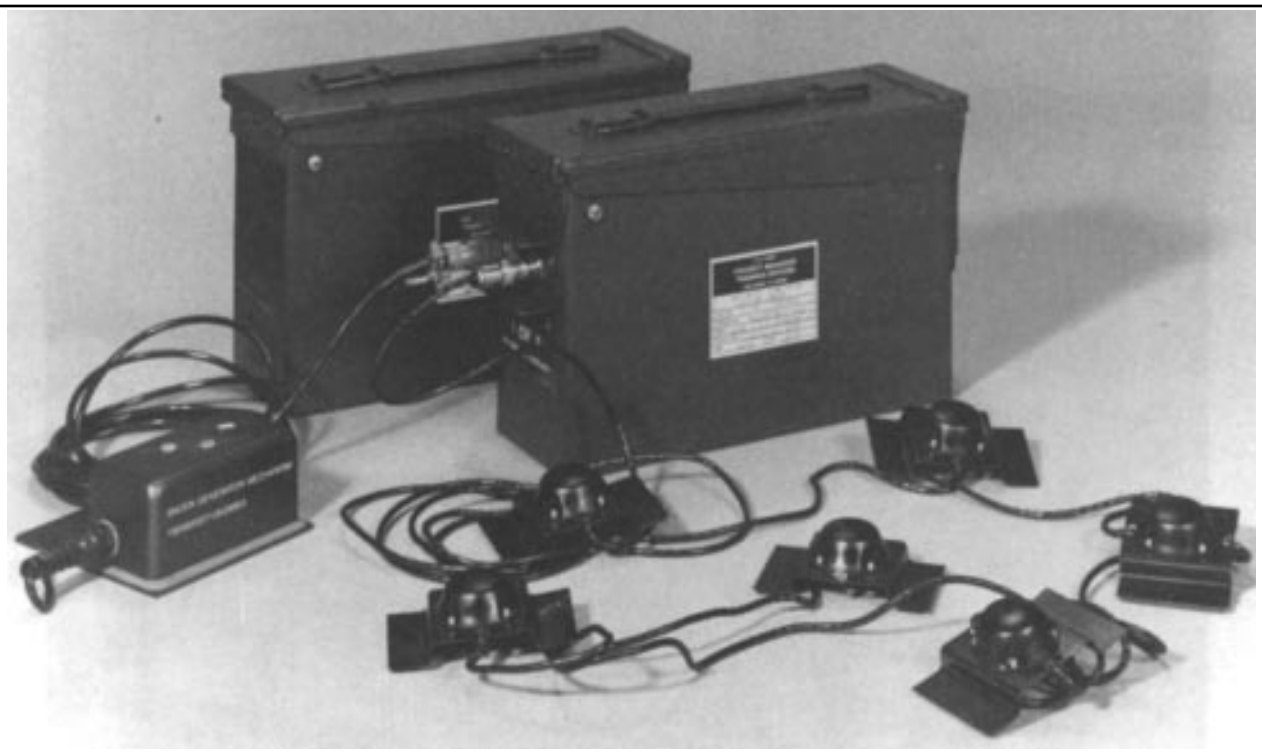
Power Requirements:
110/220 Volt, 60 Hz - CONUS
110/220 Volt, 50 Hz - Korea
220/240 Volt, 50 Hz - Europe

Applicable Publications:
TD 9-6920-708-10, Vol 1
TD 9-6920-708-10, Vol 2

Reference Publications:
TM 9-6920-708-20

Training Requirements Supported:
(Information Not Available)

INDICATOR, SIMULATOR SYSTEM, LASER TARGET INTERFACE DEVICE (LTID)



Training Category/Level Utilized:
Armor/Level 3

Logistic Responsible Command, Service, or Agency:
ACALA

Source and Method of Obtaining:
Available through local TSC.

Purpose of Trainer:
The Laser Target Interface Device (LTID) interfaces existing live-fire tank/man target mechanisms with standard MILES transmitters enabling the transmitters to knock down targets. LTID provides realistic and valuable marksmanship training without the high cost of ammunition and target repair/ replacement encountered in live-fire training programs.

Functional Description:
LTID is comprised of a Detection Assembly, an Electronic Assembly, and a Shock Generator Mechanism (SGM).

The Detection Assembly simulates target vulnerability using six detectors fastened with Velcro to the target. The Electronic Assembly contains the detector amplifier, decoder, SGM activation electronics, and two standard 6-volt lantern batteries. The SGM activates the target lift mechanism when a "hit" is decoded.

In operation, a MILES transmitter-equipped weapon engages an LTID-equipped target, the Detection Assembly receives the transmitter laser signal, converts it to electrical pulses, and routes them to the Electronic Assembly where they are amplified and decoded. If a "hit" is decoded, the SGM triggers the target lift mechanism to lower the target.

Physical Information:
Number of Pieces: Four
Electronics Assembly: 11" x 4" x 7"
Storage Case, containing: 11" x 4" x 7"
Detection Assembly: 8" x 4" x 2" (packaged)
SGM: 6" x 6" x 3" (packaged)
Total Weight: 9 lb

Equipment Required, Not Supplied:
Batteries, 6-volt, BA-200/U
Velcro, 11749428
Primer, 11749034
Roller, Hand, 6523520
Controller Gun, 11748811
Target Holding Mechanisms
MILES Transmitters

Special Installation Requirements:
None

NSN 1265-01-221-9438

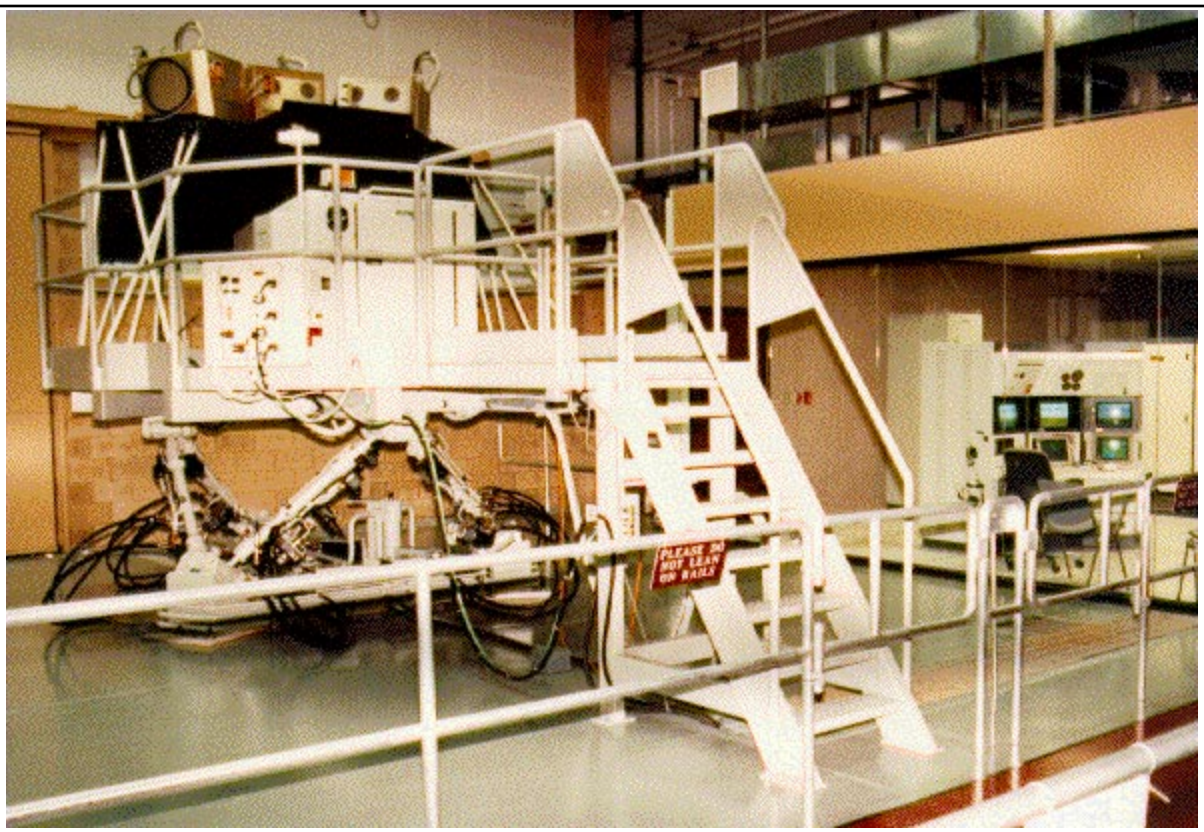
Power Requirements:
Two standard 6-volt lantern batteries

Applicable Publications:
TM 9-1265-376-10, Operator's Manual for Indicator Simulator System, Laser Target Interface Device (LTID)

Reference Publications:
None

Training Requirements Supported:
Simulated live-fire training on ranges

M1 TANK DRIVER TRAINER (TDT)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
The purpose of the M1 Tank Driver Trainer (TDT) is to develop and/or sustain the tank driving skills of the student driver and to provide cross training from similar vehicles.

Functional Description:
The M1 Tank Driver Trainer (M1TDT) provides initial and transition driver training for the M1 Abrams Armor Tank Crewman. The device consists of a driver trainer station, instructor/operator station, a visual system, an aural/audio system, a computer system, and a fully integrated 6 DOF motion system. A real-time color computer image generation (CIG) subsystem provides visual scenes to the driver through the periscope or on monitor screens for out-of-hatch training. The instructor, via the instructor/operator station, is capable of selecting a visual scene, viewing the visual scene, conitoring each trainee's performance and introducing malfunctions and emergency control situations.

Physical Information:
(Information not available)

Equipment Required, Not Supplied:
None

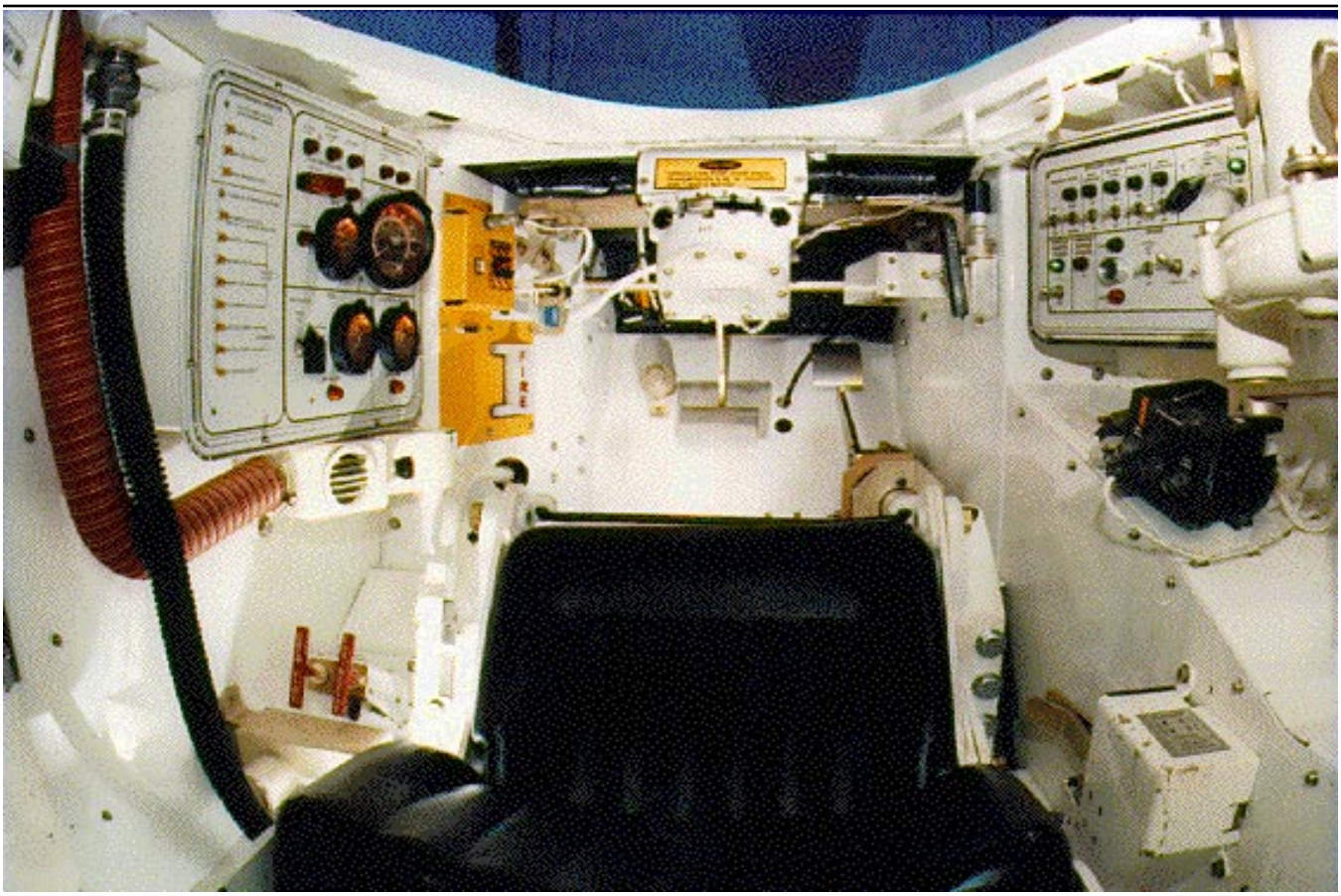
Special Installation Requirements:
Due to motion platforms, facility required 17 foot minimum ceiling height.

Power Requirements:
Motion System - 480 volts +/- 10% 50/60 Hz +/- 1% 3 Phase Delta
Host Comuter and Image Generator - 120/208 AC 60Hz 3 phase Y connection

Applicable Publications:
Instructor Utilization Handbook 9-6930-701
Operators Manual TM 9-6930-701-10

Reference Publications:
None

Training Requirements Supported:
MOSC 19 Driver



M2/M3 VIDEODISC GUNNERY SIMULATOR (M2/M3 VIGS)

Training Category/Level Utilized:
Armor/Level 2

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To provide enhanced initial, intermediate, and advanced gunnery training for the M2/M3 Bradley Fighting Vehicle. The VIGS trainer is to be used as an institutional and unit level gunnery training device. Scoring and evaluation will be accomplished in determining the gunner's ability to ''kill" stationary material-type and moving targets. Training will be accomplished in resident and field training classrooms located on gunnery ranges.

Functional Description:

DVC 17-155 is a tabletop, four-man portable, target acquisition and tracking simulator. The VIGS trainer consists of the gunner's console, a videodisc player, and an optional instructor's monitor.

The gunner's console consists of all components required to simulate the operational gunner's control station in the M2/ M3 Bradley Fighting Vehicle.

The VIGS trainer is used to simulate M2/M3 Bradley Fighting Vehicle gunnery procedures and responsibilities while in a tactical environment. Used at the institutional and unit training level, the device aids the instructor in that it gives the trainee realistic gunnery training while in a classroom environment. Using a videodisc player, the trainer is able to provide the student with battlefield motion scenes in which the trainee is responsible for the tracking of and firing on of enemy vehicles.

Scoring is based on the trainee's ability to track and properly hit enemy targets within established time limits. The data display screen located in the gunner's console provides a score and targeting information following each training exercise or "mission". The VIGS device also gives the instructor the ability to program missions with varying degrees of difficulty into lessons suited to the individual trainee's needs.

The VIGS trainer uses state-of-the-art micro-electronic and video techniques in order to present a more realistic and interesting method of training. The missions, stored on standard videodiscs, are presented in the easiest to the most difficult battlefield situations. When practical, the VIGS trainer can be used to stimulate competition between trainees by comparing missions or entire lesson scores.

The VIGS trainer achieves its functional purpose by giving M2/M3 Bradley Fighting Vehicle gunnery trainees the ability to practice techniques and procedures learned in the classroom environment. By reducing the need for operational system ''hands-on" training, the trainer also provides for a more time and cost efficient method of training.

Physical Information:

Number of pieces: Two main, separate components (instructor's monitor optional).

Gunner's Console: 265/8" H x 31" D x 23" W; 126.6 lb
Videodisc Player: 43/4" H x 163/8" D X 171/8" W; 27.5 lb
Total combined: 154.1 lb

Equipment Required, Not Supplied:

Combat vehicle crewman (CVC) helmet, 1 each.

3 KW generator, NSN 6115-00-017-8537 or equivalent (required only when operating trainer under field conditions) 1 each

Special Installation Requirements:

The trainer must be installed in a way that provides for the student to be at eye level with the sight eyepiece while sitting.

The trainer cannot be exposed to extremes in heat and humidity for extended periods of time, as this could hamper its ability to perform as designed.

Power Requirements:

120 vac, 60 Hz or
220 vac, 50 Hz

Applicable Publications:

TM 9-6920-765-12&P, Operator's Manual with parts list, Device 17-155

Reference Publications:

None

Training Requirements Supported:

MOSC 19 Series

IMPROVED TANK GUNFIRE SIMULATOR

Training Category/Level Utilized:
Armor/Level 3

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Available through local TSC.

Purpose of Trainer:
Device 17-157 is designed to simulate tank/anti-tank gunfire in tank crew training operations. Standard pyrotechnic charges are used to produce realistic noise and flash effects.

Functional Description:
The Improved Tank Gunfire Simulator can be mounted on 90 to 152 mm gun barrels. The device consists of a simulator body and clamping assembly, a control unit, and the associated cables required for component and power hookup. Also included as accessories are a transport and storage container, a technical manual, and a cleaning brush.

The standard M-21 pyrotechnic charges used in the simulator are not supplied with the unit. These charges are inserted individually into the nine firing drums of the simulator and connected by plugs to the corresponding sockets of the firing drums. The charges are ignited electrically with ignition effected by operating the trigger mechanism of the gun. Ignition is controlled through the control unit which operates from the tank's power supply.

Several safety design features set it apart from other tank gunfire simulators. All of the connecting cables for the simulator have been manufactured with shielding and are twisted to protect against stray radio frequency interference, reducing the danger of inadvertent ignition of a charge. The cables are designed so that the charges are continuously grounded except during the actual pyrotechnic charge ignition. A safety disconnect switch is included beneath the hinged cover on the rear of the simulator body. Whenever the cover is open, the switch automatically disconnects power from the control unit to the simulator body which prevents the current from reaching the ignition leads attached to the pyrotechnic charges in the firing drums. Also, a timed relay is incorporated into the control unit circuitry to control the duration of electrical flow to the pyrotechnic charges. When the trigger is pulled, power is supplied to the charge for one second ensuring that the same charge is not energized twice. The possibility of a double-fire is eliminated.

NSN None **DVC 17-157**

Physical Information:

Simulator Body: 103/4" L x 14" W x 13/4" H; 58.5 lbs
Bottom Clamp Plate: 7" L x 121/2" W x 33/4" H; 6.25 lbs
Control Unit: 8" L x 6" W x 3" H; 2.75 lbs

Equipment Required, Not Supplied:

The M-21 pyrotechnic charges used in the simulator are not supplied with the device.

Special Installation Requirements:

There are no special installation requirements. However, since the device simulates the noise of tank gunfire, trainees should take the safety precautions (hearing protection) associated with noise hazards.

Power Requirements:

Input Characteristics: 24 vdc input from the tank power supply.

Applicable Publications:

TD 17-6920-702

Reference Publications:

None

Training Requirements Supported:

ARTEP 17-55 Task

3-11-1	3-11-8	3-IV-7	3-V-8
3-11-2	3-11-9	3-IV-8	3-VI-I
3-11-3	3-IV-1	3-IV-9	3-VI-2
3-11-4	3-IV-2	3-IV-10	3-VI-3
3-11-5	3-IV-3	3-V-6	3-VI-4
3-11-6	3-IV-4	3-V-7	3-VI-5
3-11-7			

STP 17-19E24-SM/STP 17-19K24-SM

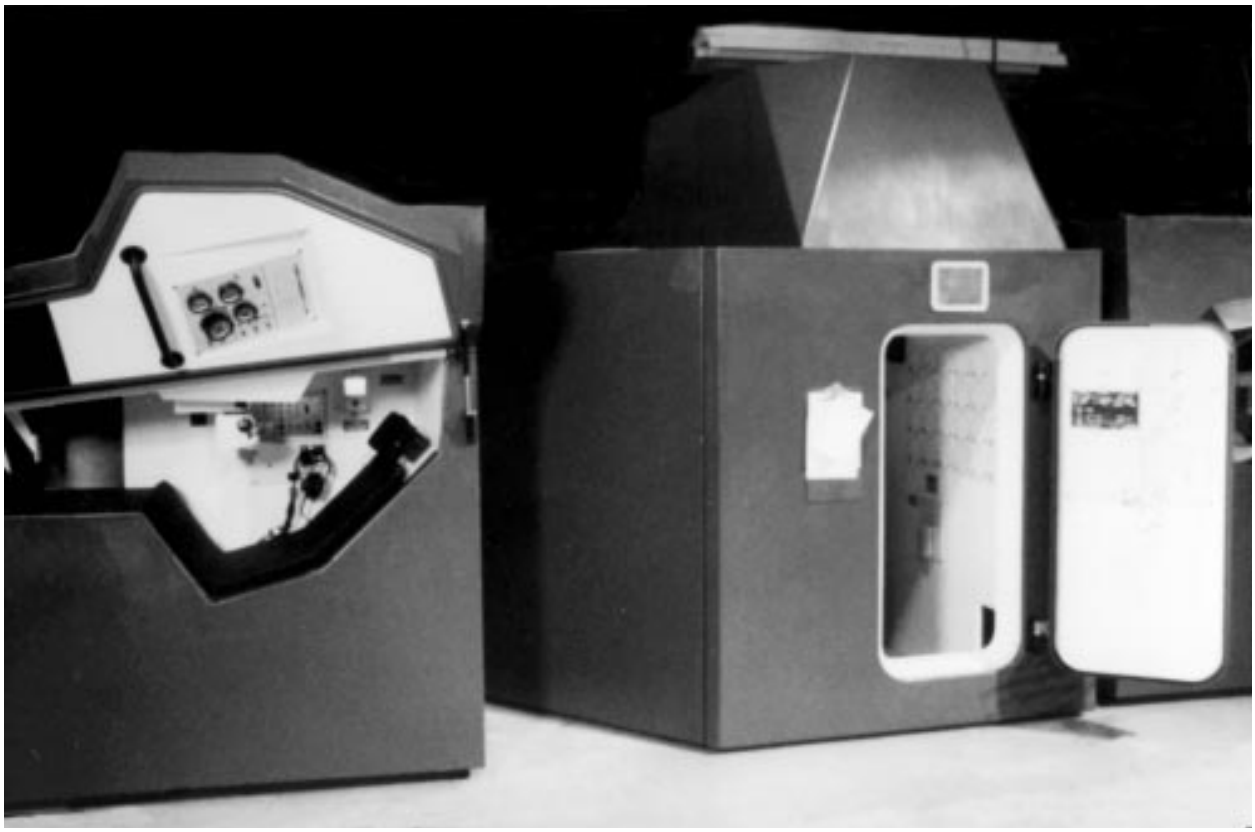
071-326-3013	171-121-3009
171-123-4004	

FM 17-19D3

051-192-4046	171-121-3007
171-121-3005	171-121-3008
171-121-3006	171-121-3009

SIMULATION NETWORK (SIMNET)

NSN Unknown **DVC 17-161 (M1)**
NSN Unknown **DVC 17-161 (M2)**
NSN Unknown **DVC 17-161 (MCC)**



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited distribution).

Purpose of Trainer:
To provide realistic training and practice for fully manned platoon- company-, and battalion-level units to fight forces on-force engagements against an opposing unit. The system provides real-time, interactive training, and provides the capability to train and sustain collective (crew through battalion level) tasks and skills in command and control, communication and maneuver, and to integrate the functions of combat and combat service support.

Functional Description:
SIMNET sites include Ml and M2/M3 interior mock-ups. These are realistic, nearly full-size Ml turret and driver's stations, and the M2/M3 crew compartment. Each station is equipped with most of the operational controls and indicators that are found in actual Ml and M2/M3 crew stations. Each simulator is a stand-alone unit that networks with other simulators using a microprocessor based host computer, graphics imaging computer, sound system, control and interface controller cards, and a terrain data base that is modeled after a pre-existing location. During the exercise the interaction of indirect fire, close air support, resupply, repair, command posts, howitzers, mortars, and supply trucks are all simulated. Semi-automated forces (company, platoon, and battalion levels controlled by a few personnel) either friendly or enemy, may be added to the simulation to increase the scope of an exercise. Realism is enhanced in SIMNET programming by the imposition of real-world limitations, such as armor protection, fuel consumption, basic ammunition loads, expended ammunition, vehicle speeds, grade climbing and obstacle crossing ability, and reliability and maintenance of components.

Physical Information:
Ml SIMNET:
Driver's Station: 78" W x 96" D; 1500 lb
Turret: 96" W x 96" D; 2862 lb
M2/M3 SIMNET:
Crew Compartment: 132" W x 96" D; 3368 lb

Equipment Required, Not Supplied:
None

Special Installation Requirements:
Due to the size and complexity of SIMNET training systems, they are housed in buildings that were tailored to their needs. Platoon-, company-, and battalion-size armor units are simulated, therefore, buildings of different sizes were built or renovated to accommodate them. The buildings have power, temperature and humidity controls, office areas, and classrooms that are necessary for the number of trainers housed in the building.

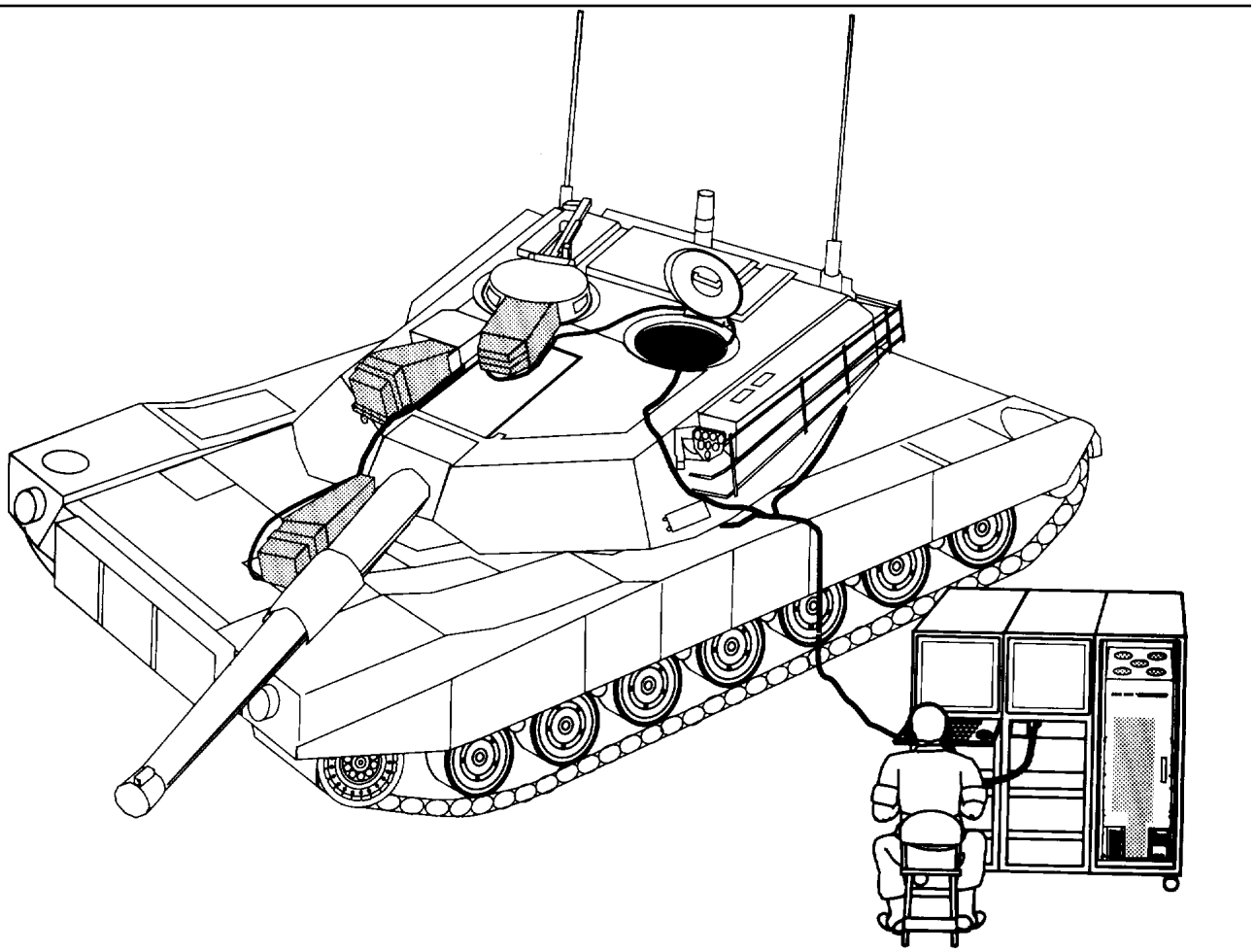
Power Requirements:
120/208 vac, 3 phase, 50 or 60 Hz (CONUS/OCONUS sites)

Applicable Publications:
TD 17-6930-702, Maintenance Manual

Reference Publications:
None

Training Requirements Supported:
MOSC 19 Series

ABRAMS FULL-CREW INTERACTIVE SIMULATION TRAINER (A-FIST)



Training Category/Level Utilized:
Armor/Level 3

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To provide sustainment training at reserve centers and armories. Training benefits in map reading, fire planning, and other forward observer procedures will also be realized.

Functional Description:
The A-FIST, previously called GUARDFIST I, is a tank-appended collective training simulator used by the Reserve Components for training both gunnery and maneuver/tactics on the M1 series tank. It allows the entire crew to conduct battle drills while the tank is non-operational (power off). It provides aural, visual and sensor simulation.

An instructor/operator selects the exercises, briefs the crew, monitors crew performance, and conducts after-action reviews. The crew performs the exercises under simulated combat conditions in the actual tank. Exercises are progressive and presented in a format patterned after the Conduct of Fire Trainer (COFT) matrix.

Exercises include execution of day/night main gun and coaxial machine gun tactical gunnery tasks; engagements of stationary/moving, single/multiple targets in desert or European terrain; and utilization of stabilized or non-stabilized operational modes.

A-FIST scores the engagements automatically; provides basic, transition, cross sustainment, and leader training; measures crew performance in increasingly difficult exercises; reflects crew proficiency over time; identifies individual, crew, and unit training shortfalls; facilitates remedial training in deficient areas; and achieves proficiency-based Tank Commander-Gunner pairing.

Components of the A-FIST include an 80486-based personal computer which controls the trainer and provides crew performance data for training management purposes; an Evans and Sutherland ESIG-2000 image generator which provides realistic exercise scenery, targets and weapons effects from a visual database; sensors on the actual tank controls which permit realistic simulation of normal crew actions; optical assemblies which present visual effects; and the audio system which replicates tank operation sounds.

Physical Information:

Instructor/Operator Station: 71" x 36" x 60"; 590 lbs
Printer: 20" x 16" x 6";12 lbs
Image Generator: 27" x 33" x 60"; 336 lbs
Monitors (three 17"): 28" x 22" x 22"; 60 lbs each
Monitors (three 14"): 22" x 19" x 18"; 40 lbs each
Tank Interface Unit: 18" x 16" x 12";280 lbs each

Equipment Required, Not Supplied:

None

Special Installation Requirements:

None

Power Requirements:

110 Vac, 60 Hz
220 Vac, 50 Hz

Applicable Publications:

TM 9-6920-716-10

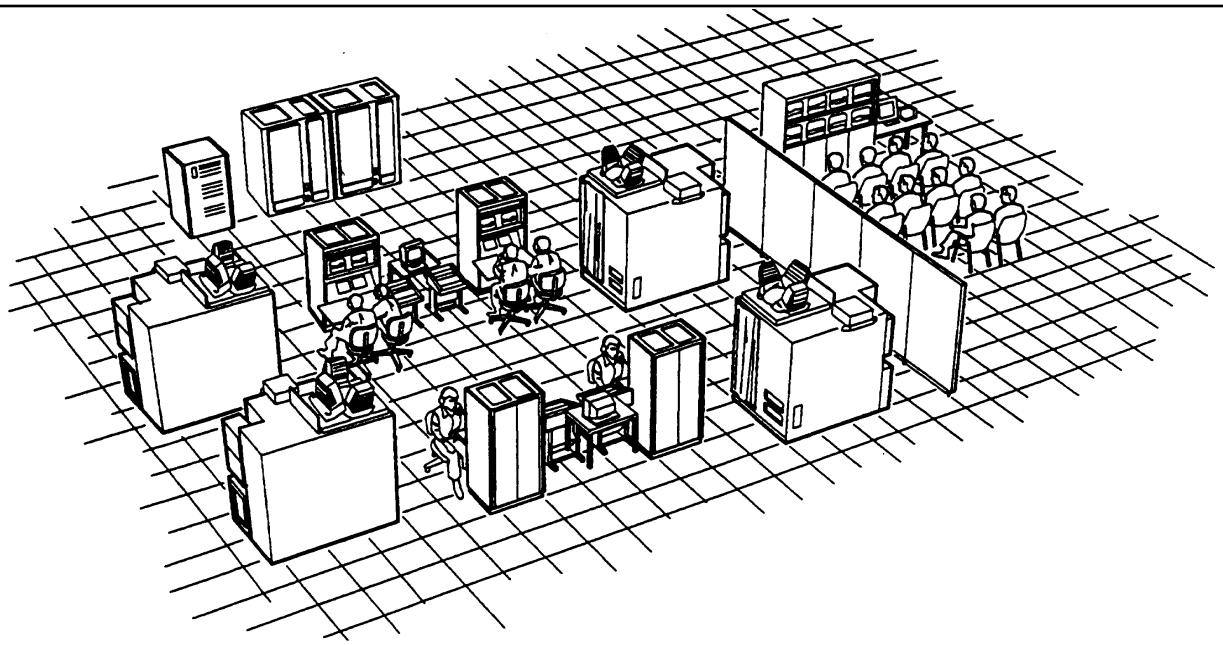
Reference Publications:

None

Training Requirements Supported:

MOSC 19K

M1A1 PLATOON GUNNERY TRAINER (PGT) (CONUS)



Training Category/Level Utilized:
Armor/Level 1

Logistics Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
A simulation system that provides platoon and crew gunnery training to commanders and gunners of the M1A1 Abrams Tank. This simulator is used to train target acquisition, identification, and engagement skills with the tank guns using both the primary and auxiliary fire control and sighting equipment against mobile and stationary threats, single and multiple target arrays, in a realistic battlefield environment during day, night, and reduced visibility conditions.

Functional Description:
DVC 17-168 is a computer-controlled simulator consisting of the following major components:

a. Two Special Purpose PT2000 Computers (SPCs) that produce realistic, high resolution, full-color scenes through the crew's sights. These scenes, which provide the crews with views of terrain, targets, ownvehicle models, and special effects, are also displayed at an associated Instructor/Operator Station (IOS) and the Remote Monitor Station (RMS).

b. A General Purpose Computer (GPC) that provides control between the various M1A1 PGT components as well as managing the total M1A1 PGT training and evaluation system.

c. Four M1A1 Tank Crew Station (CS) compartments that simulate the appearance and functions of the training-critical turret operating controls, indicators, and weapon sights for the tank commander and gunner.

d. A CVC helmet mounted head tracker that determines the current head attitude of the tank commander and causes the appropriate Field-Of-View (FOV) visual to be displayed in each of three simulated commander's unity vision blocks.

e. Four Instructor/Operator Stations (IOSs) that are used by the individual Instructor/Operators to initiate exercises, monitor crew performance, and interact with the crew during exercises.

f. A topographic map display monitor at each IOS that provides a "bird's eye" view of each exercise as it is being run. One IOS (Set 3) is furnished with Video Cassette Recorder (VCR) capability.

g. The Remote Monitoring Subsystem (RMS) is where personnel may observe the actions of the crews during an exercise via video and audio displays. Each RMS provides the ability to conduct an After Action Review of a completed training session without disturbing the on-going training.

h. Four On-Line printers (One for each IOS) that are used by the Instructor/Operator to print hard copies of crew and platoon exercise performance records.

i. An Armor Exercise Generation Subsystem (AEGS) that provides the ability to create or change exercises, scope pages and instruction pages. The creation or modification of exercises does not interfere with the on-going M1A1 PGT training.

Physical Information:
Varies among components.

Equipment Required, Not Supplied:
None

Special Installation Requirements:
The trainer must be installed in an enclosed, air conditioned building having an available vacant floor space of approximately 22 by 36 feet. Lighting and air conditioning control are pre-established building requirements. The computer, RMS and the AEGS rooms also require a controlled building environment.

Power Requirements:
208 vac $\pm$ 10%, 60 $\pm$1 Hz, 3-Phase (Wye), 4-Wire

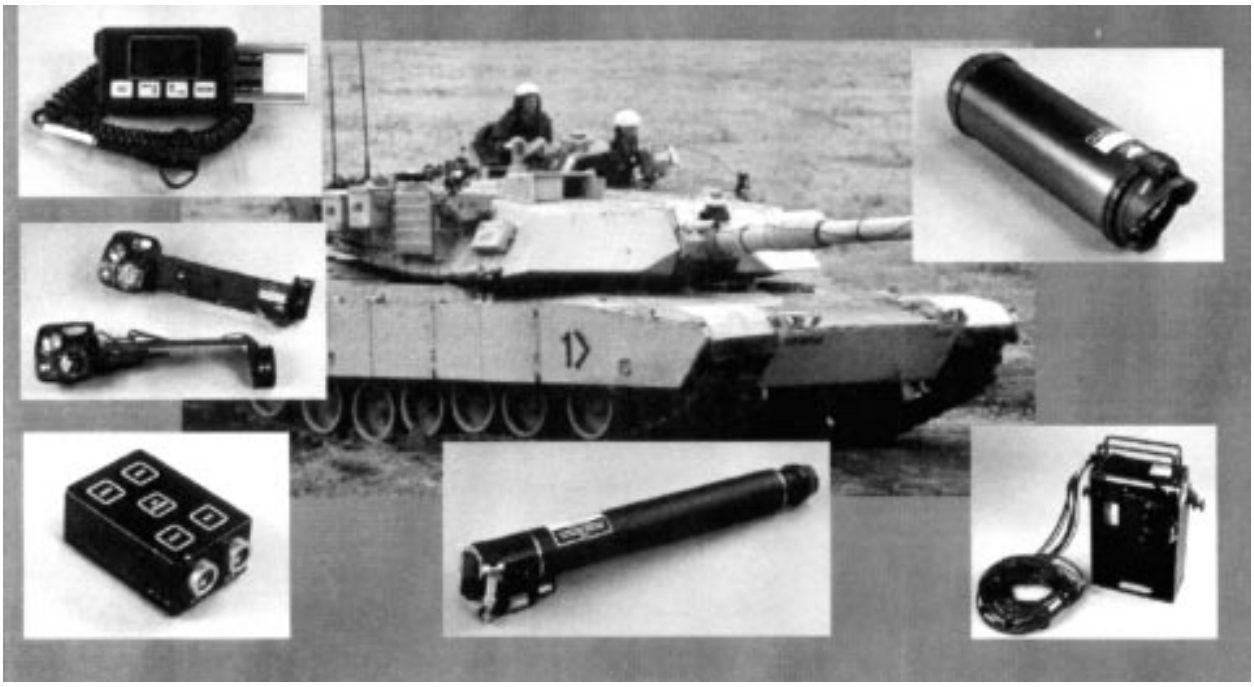
Applicable Publications:
Document Number 07C-C001-1 - Trainer, M1A1 Platoon Gunnery (M1A1-PGT)
System Interface Manual Vol. 1, Description and Maintenance Procedures
System Interface Manual Vol. 2, Parts Lists
System Interface Manual Vol. 3, Diagrams and Assembly Drawings
System Interface Manual Vol. 4, Running Lists
Document Number 07C-C002-1 - Ft. Knox M1A1 Platoon Gunnery Trainer (PGT) Training System Utilization Handbook
Document Number PGT-SG1-A00F - Student Lesson Guide Vol 1 and 2
Document Number PGT-ILG-A00F - Instructor Lesson Guide

Reference Publications:
None

Training Requirements Supported:
MOSC 19K (M1A1 Armor Crewman), 12B (Armor Officer)

TANK WEAPON GUNNERY SIMULATION SYSTEM/PRECISION GUNNERY SYSTEM (TWGSS/PGS)

NSN None	**DVC 17-172/1 TWGSS for M1, M1A1 and M1IP**
NSN None	**DVC 17-172/2 TWGSS for M1A2**
NSN None	**DVC 17-172/3 PGS for M2/M3, M2A1/M3A1, and M2A2/M3A2**
NSN None	**DVC 17-172/4 TWGSS for the Armored Gun System (AGS)**
NSN None	**DVC 17-172/5 PGS for Light Armored Vehicle (LAV)**
NSN None	**DVC 17-172/6 Retroreflectors**
NSN None	**DVC 17-172/7 Controller Gun**
NSN None	**DVC 17-172/8 TWGSS for M1A2 Main Battle Tank: System Enhancement Package (SEP)**
NSN None	**DVC 17-172/9 PGS for M2A3/M3A3 Bradley Fighting Vehicle**
NSN None	**DVC 17-172/10 PGS for M6 Bradley Fighting Vehicle Linebacker**
NSN None	**DVC 17-172/11 Bradley M2/M3 Precision Gunnery System (PGS)**



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Available through local TSC

Purpose of Trainer:

The Tank Weapon Gunnery Simulation System (TWGSS) for M1, M1A1, M1A2, and M1IP Main Battle Tanks and Precision Gunnery System (PGS) for M2/M3, M2A1/M3A1, and M2A2/M3A2 Bradley Fighting Vehicle (TWGSS/PGS) develops, maintains, and evaluates crew and unit proficiency in gunnery skills. TWGSS trains gunnery tasks as described in Tank Gunnery Manuals (FM17-12 series). It also trains those tasks for maneuver exercises at platoon, company, and battalion level in ARTEPs 17-237-10, 17-385 and 17-485 MTPs. PGS trains gunnery tasks as described in M2/M3 manuals FM 23-1 and FT 25-A1. It also trains those tasks for maneuver exercises at platoon, company, and battalion level in ARTEPs 7-70 Drill, 17-57-10 MTP and 7-20 MTP.

TWGSS/PGS is used to provide realistic simulations for the preparation of live firing the gunnery tables in day and night conditions. It allows the training of crews in collective tasks for platoon, company, and battalion level force-on-force exercises. With TWGSS/PGS, precision gunnery is integrated with tactical training, to give the crews experience in precision and degraded mode gunnery while under the pressure of opposing force engagements.

For Device 17-172/1, a retrofit kit (Device 17-172/1A) is available to adapt TWGSS to the M1A2 tank.

For Device 17-172/6, a mini-size retroflector (Device 17-172/6M) is also available for use on scaled ranges.

Functional Description:

The Tank Weapon Gunnery Simulation System (TWGSS) is a vehicle mounted device. The TWGSS can be mounted on Ml, M1IP, M1A1, and M1A2 main battle tanks, and simulates

main gun and coaxial machine gun firing. The TWGSS uses a laser transceiver, retro-reflectors, detectors, computer system, tracer burst obscuration, an aural cue effects generator, control panel target interface, and after action review computer. A controller gun has been designed for use in force-on-force training. The controller gun will allow a referee to intervene and control the training scenario from a range of up to 2000 meters.

Physical Information:
(Information not available)

Equipment Required, Not Supplied:
Battery, 9 v, Alkaline

Special Installation Requirements:
None

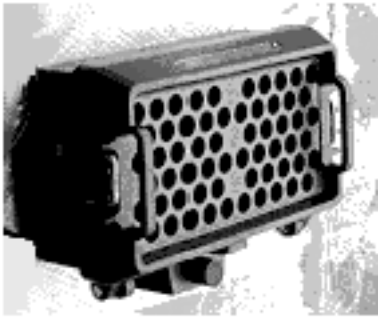
Power Requirements:
21-29 vdc

Applicable Publications:
(Information not available)

Reference Publications:
(Information not available)

Training Requirements Supported:
(Information not available)

Main Gun Signature Simulator (MGSS)



Training Category/Level Utilized:
Combat Arms/Level 3

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Available through local TSC

Purpose of Trainer:
The Purpose of this trainer is to replace Basic MILES systems at home-station due to age of technology and cost to maintain.

The MGSS is a component of the Multiple Integrated Laser Engagement System 2000 (M2K). The M2K is a family of training systems which simulate the effects of direct-fire weapons at their operational ranges. The M2K system is primarily used for force-on-force training from squad up to and including Brigade level. The M2K system incorporates a After Action Review capability not in the Basic MILES, which greatly enhances training for the soldiers participating in the exercises. M2K equipment is downward compatible with the Basic MILES equipment presently fielded.

Functional Description:
The MGSS is mounted on the M1A1/M1A2 tank and simulates the main gun firing. The MGSS holds 60 pyrotechnics when fully loaded and is "keyless" for safety. When the main gun trigger is activated a signal goes to the MGSS and fires 1 pyrotechnic for each firing. The pyrotechnic creates the flash and bang of the main gun, triggering the Universal Laser Transmitter (ULT).

Physical Information:
MGSS Launcher
Interface Cable
Transit case dimensions: 46.3"L X 40.7"W X 17.5"H
(1 MGSS Kits per case)

Equipment Required, Not Supplied:
None

Special Installation Requirements:
None

Power Requirements:
Vehicle power

Applicable Publications:
9-6920-892-10

Reference Publications:
None

Training Requirements Supported:
ARTEPs 7-15, 17-55, 71-2
MOSCs 11B, 11Z, 19D, 19E, 19Z

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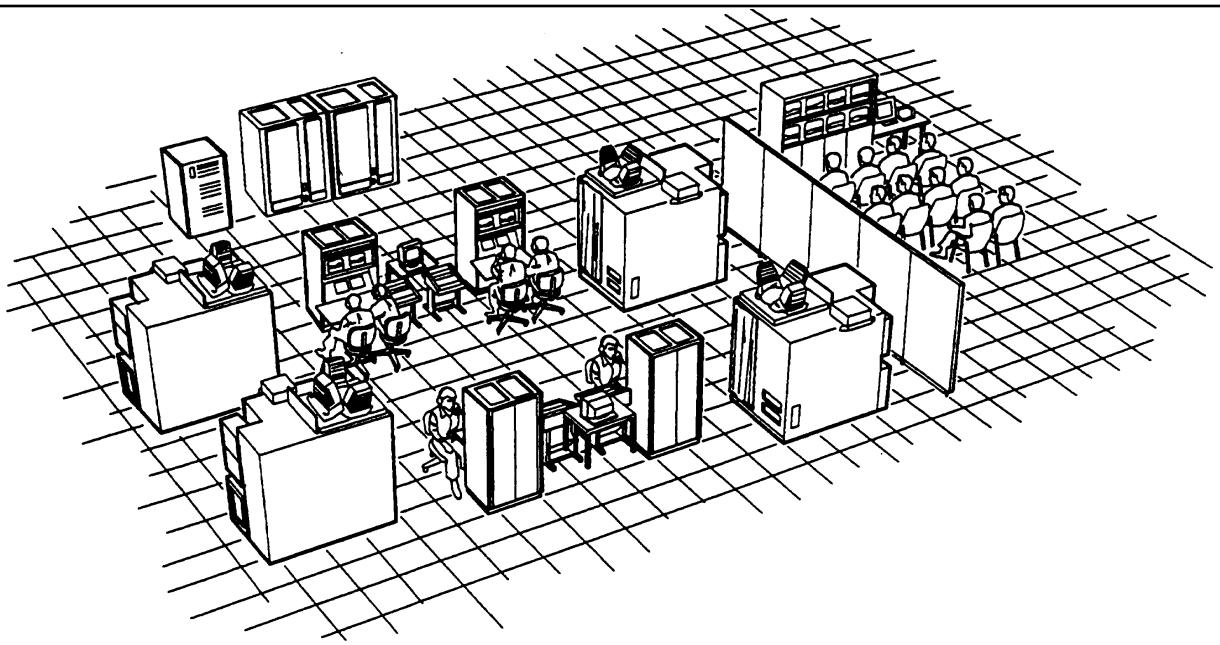
M1A1 PLATOON GUNNERY TRAINER (PGT) (UNSHELTERED) (USAREUR)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
A simulation system that provides platoon and crew gunnery training to commanders and gunners of the M1A1 Abrams Tank. This simulator is used to train target acquisition, identification, and engagement skills with the tank guns using both the primary and auxiliary fire control and sighting equipment against mobile and stationary threats, single and multiple target arrays, in a realistic battlefield environment during day, night, and reduced visibility conditions.

Functional Description:
DVC 17-181 is a computer-controlled simulator consisting of the following major components:

a. Two Special Purpose PT2000 Computers (SPCs) that produce realistic, high resolution, full-color scenes through the crew's sights. These scenes, which provide the crews with views of terrain, targets, ownvehicle models, and special effects, are also displayed at an associated Instructor/ Operator Station (IOS) and the Remote Monitor Station (RMS).

b. A General Purpose Computer (GPC) that provides control between the various M1A1 PGT components as well as managing the total M1A1 PGT training and evaluation system.

c. Four M1A1 Tank Crew Station (CS) compartments that simulate the appearance and functions of the training-critical turret operating controls, indicators, and weapon sights for the tank commander and gunner.

d. Four Instructor/Operator Stations (IOS) used by the Instructor/Operators to initiate exercises, monitor crews performance, and interact with crews during exercises.

e. A topographic map display monitor at each IOS that provides a "bird's eye" view of each exercise as it is being run.

f. A Remote Monitoring Subsystems (RMS) where personnel may observe the actions of the crews during an exercise. Other RMS components permit the conduct of an After Action Review (AAR) of a completed training session without disturbing the on-going training.

g. Four On-Line printers (One for each IOS) that are used by the Instructor/Operator to print hard copies of crew and platoon exercise performance records.

Physical Information:
Varies among components.

Equipment Required, Not Supplied:
None

Special Installation Requirements:

The trainer must be installed in an enclosed, air conditioned building having an available vacant floor space of approximately 22 by 36 feet. Lighting and air conditioning control are pre-established building requirements.

Power Requirements:

208 vac ± 10%, 60 ±1 Hz, 3-Phase (Wye), 4-Wire

Applicable Publications:

Document Number 93B-C003-M1A1U-1

System Interface Manual Vol. 1, Description and Maintenance Procedures

System Interface Manual Vol. 2, Parts Lists

System Interface Manual Vol. 3, Diagrams and Assembly Drawings

System Interface Manual Vol. 4, Running Lists

Document Number 93B-C001-M1A1-1 - Training System Utilization Handbook

Document Number PGT-SG1-M1A1-1 - Student Lesson Guide Vol 1 and 2

Document Number PGT-ILG-M1A1-1 - Instructor Lesson Guide

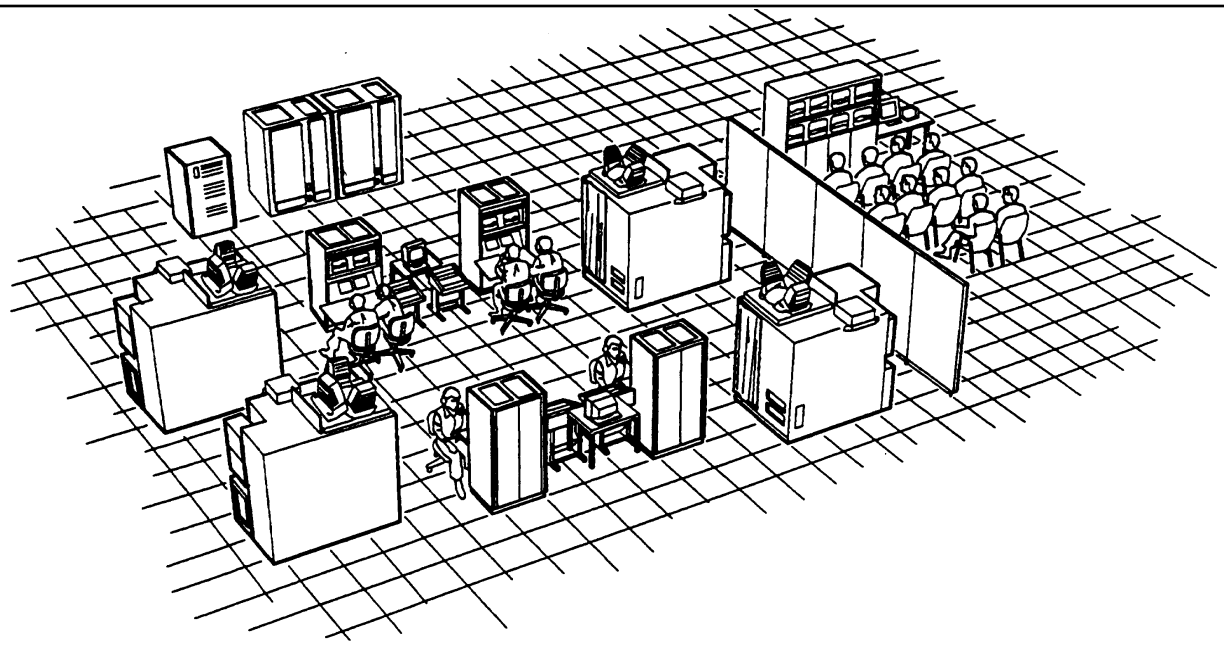
Reference Publications:

None

Training Requirements Supported:

MOSC 19K (M1A1 Armor Crewman), 12B (Armor Officer)

M2A1/M3A1 PLATOON GUNNERY TRAINER (PGT) (UNSHELTERED) (USAREUR)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
A simulation system that provides platoon and crew gunnery training to commanders and gunners of the M2A1/M3A1 Bradley Fighting Vehicle (BFV). This simulator is used to train target acquisition, identification, and engagement skills with the TOW, coaxial machine gun, and 25mm gun using both the primary and auxiliary fire control and sighting equipment against mobile and stationary threats, single and multiple target arrays, in a realistic battlefield environment during day, night, and reduced visibility conditions. The system provides training in two PGT modes (crew and platoon), two CAT '91 modes (crew and platoon) and the COFT mode.

Functional Description:
DVC 17-182 is a computer-controlled simulator consisting of the following major components:

a. Two Special Purpose PT2000 Computers (SPCs) that produce realistic, high resolution, full-color scenes through the crew's sights. These scenes, which provide the crews with views of terrain, targets, ownvehicle models, and special effects, are also displayed at an associated Instructor/Operator Station (IOS) and the Remote Monitor Station (RMS).

b. A General Purpose Computer (GPC) that provides control between the various M2A1/M3A1 PGT components as well as managing the total M2A1/M3A1 PGT training and evaluation system.

c. Four M2A1/M3A1 Tank Crew Station (CS) compartments that simulate the appearance and functions of the training-critical turret operating controls, indicators, and weapon sights for the tank commander and gunner.

d. Four Instructor/Operator Stations (IOS) used by the Instructor/Operators to initiate exercises, monitor crews performance, and interact with crews during exercises.

e. A topographic map display monitor at each IOS that provides a "bird's eye" view of each exercise as it is being run.

f. A Remote Monitoring Subsystems (RMS) where personnel may observe the actions of the crews during an exercise. Other RMS components permit the conduct of an After Action Review (AAR) of a completed training session without disturbing the on-going training.

g. Four On-Line printers (One for each IOS) that are used by the Instructor/Operator to print hard copies of crew and platoon exercise performance records.

Physical Information:
Varies among components.

Equipment Required, Not Supplied:
None

Special Installation Requirements:
The trainer must be installed in an enclosed, air conditioned building having an available vacant floor space of approximately 22 by 36 feet. Lighting and air conditioning control are pre-established building requirements.

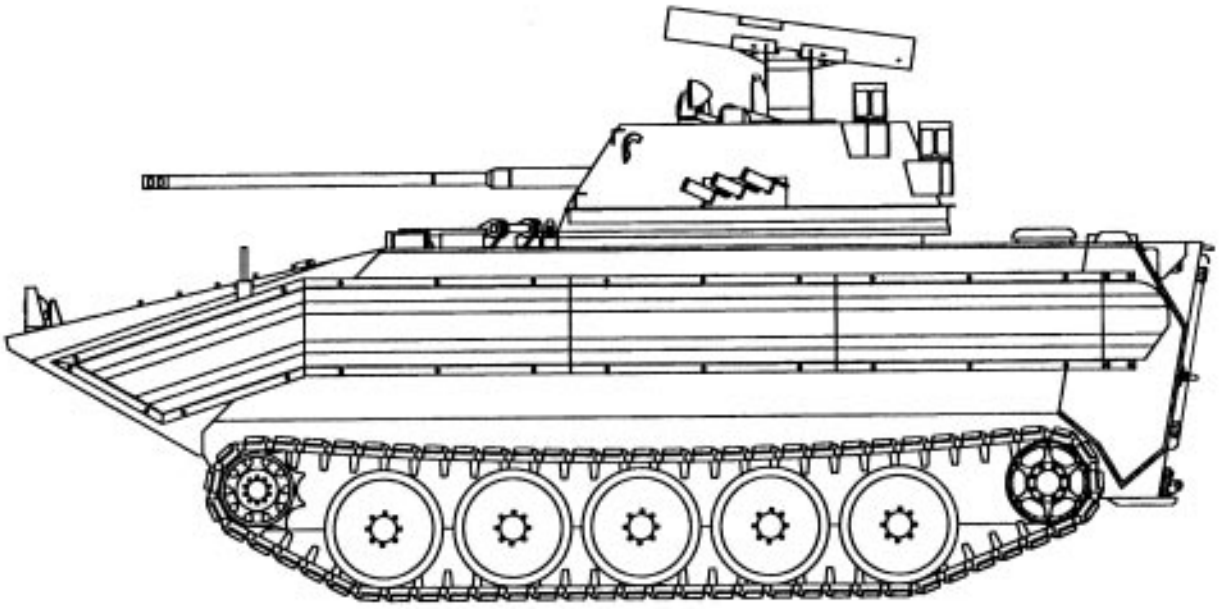
Power Requirements:
208 vac ± 10%, 60 ±1 Hz, 3-Phase (Wye), 4-Wire

Applicable Publications:
Document Number 93B-C003-M2A1-1
System Interface Manual Vol. 1, Description and Maintenance Procedures
System Interface Manual Vol. 2, Parts Lists
System Interface Manual Vol. 3, Diagrams and Assembly Drawings
System Interface Manual Vol. 4, Running Lists
Document Number 93B-C001-M2A1-1 - Training System Utilization Handbook
Document Number PGT-SG1-M2A1-1 - Student Lesson Guide Vol 1 and 2
Document Number PGT-ILG-M2A1-1 - Instructor Lesson Guide

Reference Publications:
None

Training Requirements Supported:
MOSC 11M (M2 BFV), 19D (M3 BFV)

M113/BMP-2 OPPOSING FORCE (OPFOR) SURROGATE VEHICLE (OSV)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
To provide realistic, challenging and cost-effective Opposing Force (OPFOR) BMP-2 Surrogate Vehicle (OSV) representation during force-on-force exercises at the National Training Center. It is a realistic simulation of the Russian manufactured BMP-2 Infantry Fighting Vehicle.

Functional Description:
The OSV is an M901A3 Carrier, Anti-Tank (TOW), Full Tracked Armored vehicle modified to look like BMP-2. The OSV has a stabilized two-man turret and visual modifications to simulate the appearance of the BMP-2, including weapon systems. The turret is ruggedized for crew safety with the durability to withstand minor object impact, environmental and minor collisions

Physical Information:
122" W x 98" H x 245" L; 27,700 lb

Equipment Required, Not Supplied:
None

Special Installation Requirements:
None

Power Requirements:
Electrical power is provided by the vehicle's batteries.

Applicable Publications:
(Information not available)

Reference Publications:
(Information not available)

Training Requirements Supported:
MOSC 11M, 45K, 63H, 63T

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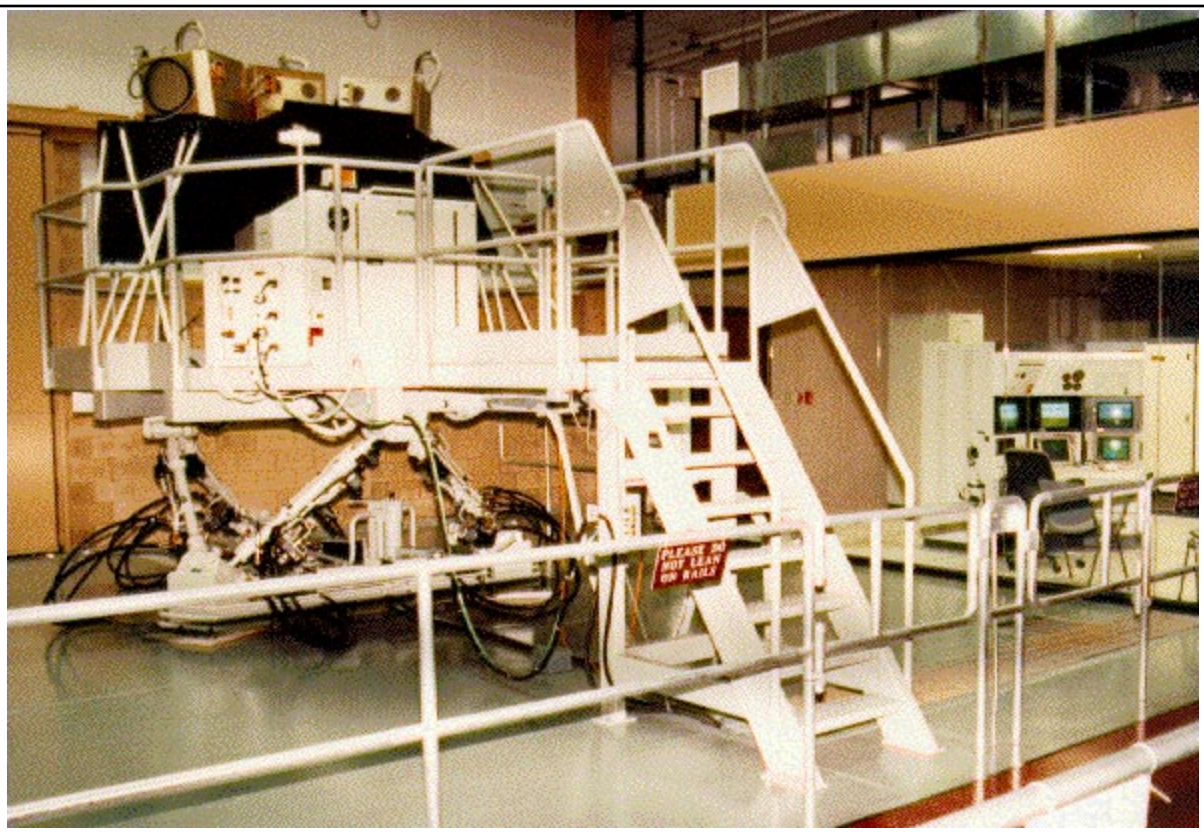
M1A2 TANK DRIVER TRAINER (TDT)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
Initial and transition driver training for the M1Abrams Armor Tank Crewman at Ft. Knox, Kentucky

Functional Description:
The M1A2 Tank Driver Trainer (M1TDT) provides Advanced and transition driver training for the M1A2 Abrams Armor Tank Crewman. The device consists of a driver trainer station, instructor/operator station, a visual system, an aural/audio system, a computer system, and a fully integrated 6 DOF motion system. A real-time color computer image generation (CIG) subsystem provides visual scenes to the driver through the periscope or on monitor screens for out-of-hatch training. The instructor, via the instructor/operator station, is capable of selecting a visual scene, viewing the visual scene, monitoring each trainee's performance and introducing malfunctions and emergency control situations. The M1A2 TDT has two training databases; European and Desert. The Drivers Integrated Display (DID) and the Battlefield Override are two hardware additions to this trainer.

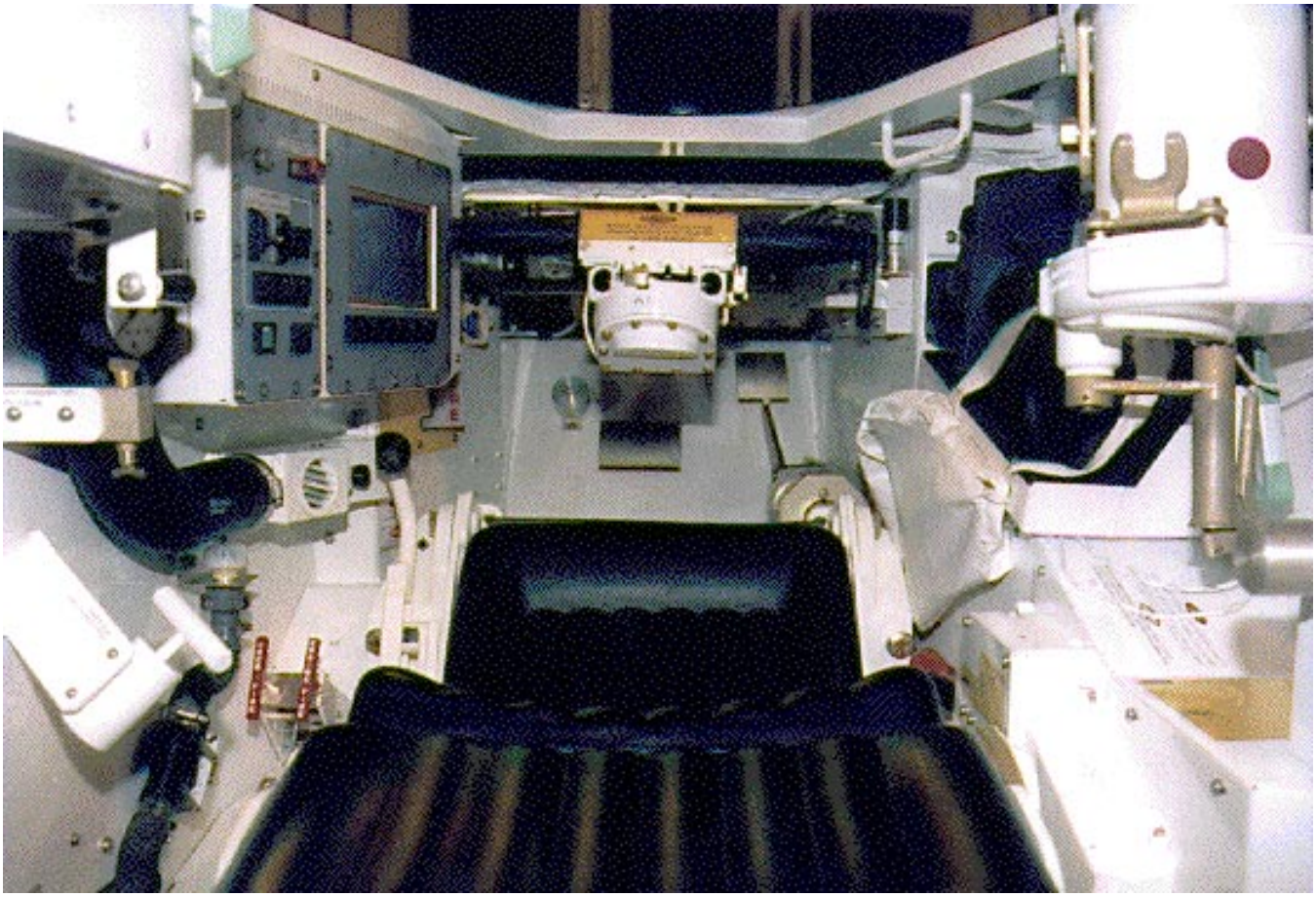
Physical Information:
(Information not available)

Equipment Required, Not Supplied:
None

Special Installation Requirements:
Due to motion platforms, facility required 17 foot minimum ceiling height.

Power Requirements:
480 volts +/- 10%, 50/60 Hz +/- 1%, 3 Phase Delta connection

Host Comuter and Image Generator - 120/208 AC 60Hz, 3 phase Y connection



Applicable Publications:

Instructor Utilization Handbook 17-6930-705
Operators Manual TM 17-6930-705-10

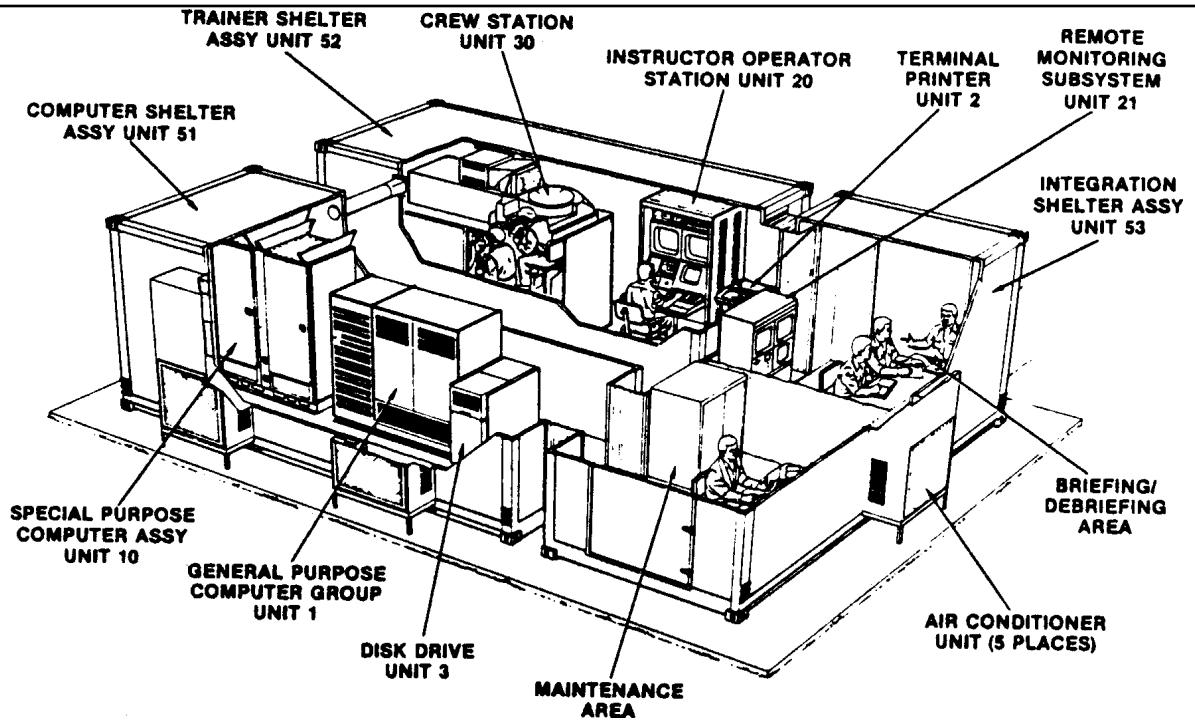
Reference Publications:

None

Training Requirements Supported:

MOSC 19 Advanced Driver

M1A2 TANK UNIT CONDUCT OF FIRE TRAINER (SHELTERED) (M1A2 U-COFT SHELTERED)



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
Provides realistic training for the development of basic and advanced gunnery skills for the M1A2 Abrams tank commander and gunner.

Functional Description:
The M1A2 Tank Unit Conduct of Fire Trainer (Sheltered) U-COFT consists of the following components:

a. Visual Subsystem (VS). The VS produces full-color scenes and terrain data used in the U-COFT system.

b. Crew Station Subsystem (CSS). The CSS contains a mock-up of portions of an actual M1A2 crew compartment, and simulates the appearance and functions of training-essential turret operating controls, indicators, and weapon sights. The CSS also contains communication visual display, and sound simulation subsystems.

c. Instructor/Operator Station Subsystem (I/OSS). The I/OSS initiates exercises, monitors the crew's performance, and interacts with the crew during the training and evaluation process.

d. Remote Monitoring Station (RMS). The RMS allows remote observation of ongoing training.

e. Computational Subsystem (CS). The CS controls and integrates the U-COFT components and manages the total U-COFT training and evaluation system.

f. Commander's Integrated Display/Gunner's Control Display Panel Subsystem (CID/GCDPS).

g. Shelter Subsystem (SS). The SS consists of three shelters which contain the power conditioner and distribution network, lighting, air conditioning, and fire detection. In addition the shelters have the following content:

(1). The Computer Shelter contains the Computational Subsystem and the Visual Subsystem.

(2). The Trainer Shelter contains the Crew Station Subsystem and the Instructor/Operator Station Subsystem.

(3). The Integration Shelter contains the Remote Monitoring Station the Maintenance Area and the Debriefing Area.

Physical Information:
Computer Shelter: 238.5" L x 96" W x 96" H; 17,000 lb
Trainer Shelter: 238.5" L x 96" W x 96" H; 15,000 lb
Integration Shelter: 238.5" L x 96" W x 96" H; 14,000 lb

Equipment Required, Not Supplied:
None

Special Installation Requirements:
The Government provides a clear and level site to specified drainage and compactness, and also electrical and telephone lines. The site must be a minimum of 40' x 38'. When multiple adjacent installations are planned at the same location, the size of each site may be 40' x 32'. The contractor provides a concrete pad and the electrical interface from the power source. The contractor also provides an electrical distribution center as the interface between the power source and the trainer.

Power Requirements:
120/208 vac ±10%, 3-phase, 60 Hz ±1%, 5 wire. Maximum peak power is 103 KVA, including 20% design reserve.

Applicable Publications:
Operator Manual
System Maintenance Manual

Reference Publications:
Instructor Utilization Handbook

Training Requirements Supported:
MOSC 19K

M1A2 TANK PLATOON CONDUCT OF FIRE TRAINER (M1A2 P-COFT)

(PICTURE NOT AVAILABLE)

Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
Provides realistic training for the development of basic and advanced gunnery skills for the M1A2 Abrams tank commander and gunner. Also provides realistic training at the platoon level with special emphasis on fire control and fire distribution.

Functional Description:
The M1A2 Tank Platoon Conduct of Fire Trainer P-COFT consists of the following components:

a. Simulator Room. Contains four Crew Station Subsystems (CSS), four Instructor/Operator Subsystems (I/OSS), and one Master Instructor Station Subsystem (MISS). The CSS includes the crew shelter, which is a mock-up of portions of an actual M1A2 crew compartment, and simulates the appearance and functions of training-essential turret operating controls, indicators, and weapon sights. The CSS also contains communication visual display, and sound simulation subsystems. The I/OSS monitors the crew's performance and enables the instructor to interact with the crew during the training and evaluation process.

b. Remote Monitor Room. Contains the Remote Monitoring Station (RMS), which allows remote observation of ongoing training.

c. Computer Room. Contains the Computational Subsystem (CS) and two Visual Subsystems (VS). The CS controls and integrates the P-COFT components and manages the total P-COFT training and evaluation system. Each VS produces full-color scenes and terrain data used in two stations of the P-COFT system.

Physical Information:
Crew Station: 126" W x 62" D x 70" H; 784 lb
Instructor Station: 72" W x 30" D x 63" H; 227 lb
Master Instructor Station: 72" W x 30" D x 63" H; 227 lb
Remote Monitor Station: 72" W x 30" D x 63" H; 191 lb
Image Generator: 113" W x 36" D x 73" H; 680 lb
Computer System: 19" W x 36" D x 73" H; 680 lb
Datawave: 104" W x 30" D x 76" H; 91 lb
EMI Filter: 25" W x 20" D x 51" H; 11 lb

Equipment Required, Not Supplied:
None

Special Installation Requirements:
The Government provides a building to house the P-COFT and the associated facilities for office space and conference rooms.

Power Requirements:
120/208 vac $\pm$10%, 3-phase, 60 Hz $\pm$1%, 5 wire. Maximum peak power is 90 KVA, including 25% design reserve.

Applicable Publications:
Operator Manual
System Maintenance Manual

Reference Publications:
Instructor Utilization Handbook

Training Requirements Supported:
MOSC 19K

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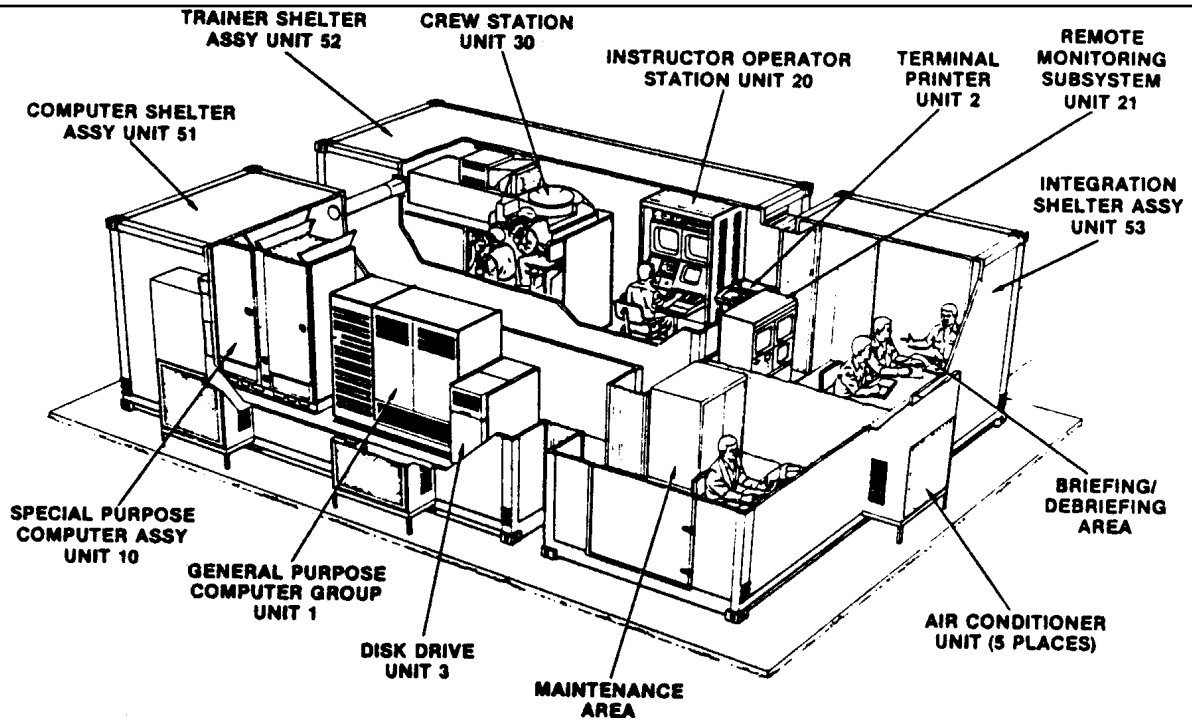
M2A2/M3A2 BRADLEY FIGHTING VEHICLE (BFV) UNIT-CONDUCT OF FIRE TRAINER (U-COFT) OPERATION DESERT STORM (ODS) ENHANCEMENTS



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
The ODS enhanced COFT mission is to develop or sustain critical gunnery skills required for qualification of vehicle commanders and gunners. The COFT system provides training over a variety of situations encountered in combat. Exercises range from simple target acquisition and firing on a stationary target to more difficult scenarios involving ammunition selection, night conditions, own vehicle motion, multiple moving targets, variable visibility, and other complex conditions.

Functional Description:
Device 17-209 added the following ODS enhancements to existing Device 17-74A:

a. Hardware and software to replicate the M2A2/M3A2 Bradley Eyesafe Laser Rangefinder (BELRF)

b. Nonfunctional hardware upgrades to replicate the M2A2/M3A2 Bradley Missile Countermeasures Device (MCD)

c. Nonfunctional hardware upgrades to replicate the M2A2/M3A2 Bradley Navigation/Positioning System (NAV/POS)

d. Hardware and software to replicate the M2A2/M3A2 Bradley Battlefield Combat Identification System (BCIS) (Initial Enhancement only).

Physical Information:
Computer Shelter: 238.5" x 96" x 96"; 12,000 lb.
Trainer Shelter: 238.5" x 96" x 96"; 9,000 lb.
Integration Shelter: 238.5" x 96" x 96"; 7,000 lb.

Equipment Required, Not Supplied:
None

Special Installation Requirements:
The Government provides a clear and level site to specified drainage and compactness, and also electrical and telephone lines. The site must be a minimum of 40' x 38'. When multiple adjacent installations are planned at the same location, the size of each site may be 40' x 38'. The contractor provides a concrete pad and the electrical interface from the power source. In CONUS and where 60Hz power is available at OCONUS sites, the contractor provides an electrical distribution center and isolation transformer as the interface between the power source and the trainer. Where only 50Hz power is available, the contractor installs a transformer, and electrical distribution center or an electrical service center with both.

Power Requirements:

120/208 vac, 3-Phase, 50/60 Hz, 4 wire. Maximum peak power is 125 KVA, including 20% design reserve.

Applicable Publications:

TM 9-6920-891-10 Operator's Manual
TM 9-6920-891-23 Org/Direct Support Maintenance
TM 9-6920-891-23-100 Organizational/Direct Support. Assembly Drawings and Parts List
TM 55-6920-737-15 Transportability Instructor's Handbook

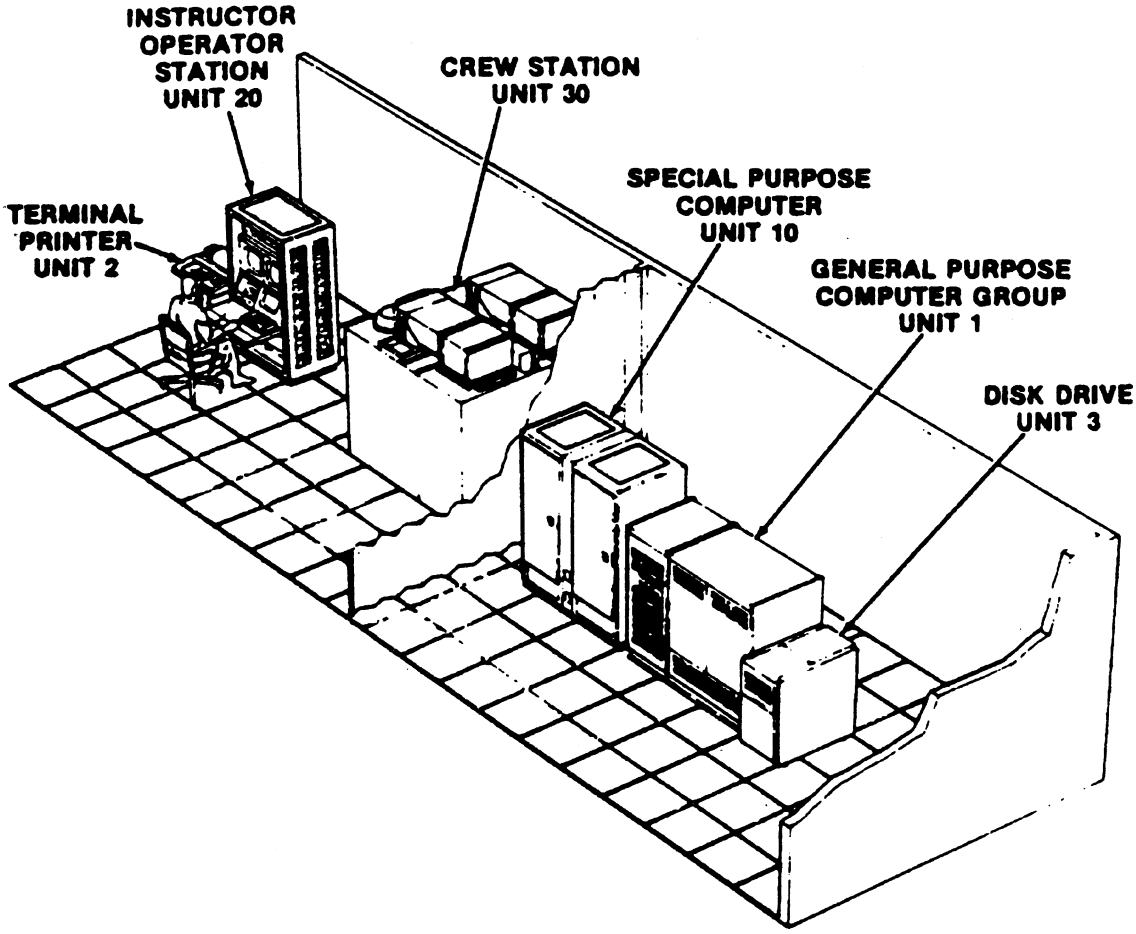
Reference Publications:

Information not available.

Training Requirements Supported:

Information not available.

M2A2/M3A2 BRADLEY FIGHTING VEHICLE (BFV) INSTITUTIONAL-CONDUCT OF FIRE TRAINER (I-COFT) OPERATION DESERT STORM (ODS) ENHANCEMENTS



Training Category/Level Utilized:
Armor/Level 1

Logistic Responsible Command, Service, or Agency:
STRICOM

Source and Method of Obtaining:
Not generally available for issue (limited production).

Purpose of Trainer:
The ODS enhanced COFT mission is to develop or sustain critical gunnery skills required for qualification of vehicle commanders and gunners. The COFT system provides training over a variety of situations encountered in combat. Exercises range from simple target acquisition and firing on a stationary target to more difficult scenarios involving ammunition selection, night conditions, own vehicle motion, multiple moving targets, variable visibility, and other complex conditions.

Functional Description:
Device 17-210 added the following ODS enhancements to existing Device 17-73:

a. Hardware and software to replicate the M2A2/M3A2 Bradley Eyesafe Laser Rangefinder (BELRF)

b. Nonfunctional hardware upgrades to replicate the M2A2/M3A2 Bradley Missile Countermeasures Device (MCD)

c. Nonfunctional hardware upgrades to replicate the M2A2/M3A2 Bradley Navigation/Positioning System (NAV/POS)

d. Hardware and software to replicate the M2A2/M3A2 Bradley Battlefield Combat Identification System (BCIS)(Initial Enhancement only).

Upon installation of the ODS enhancements, the trainer will lose the ability to function in the I-COFT mode. The four units that are linked to function as an I-COFT will no longer be linked; therefore the trainer will only function in the Unit-Conduct of Fire Trainer (U-COFT) mode.

Physical Information:

Special Purpose Computer (SPC): 61" x 30" x 75"; 3500 lb.
Instructor Operator Station (IOS): 41" x 51" x 72"; 1041 lb.
M1 Crew Station: 65" x 90" x 64"; 2700 lb.
General Purpose Computer (GPC): 47" x 30" x 64"; 1200 lb.
GPC EXP Cabinet: 26" x 30" x 64"; 600 lb.
Disk Unit: 21" x 36" x 33"; 370 lb.
Printer: 28" x 34" x 33"; 150 lb.

Equipment Required, Not Supplied:

None

Special Installation Requirements:

The trainer must be installed in an enclosed, air conditioned building having an available vacant floor space of approximately 11 by 36 feet. Lighting and air conditioning control are pre-established building requirements.

Power Requirements:

SPC: 120/208 vac, 50 A, 3 Phase, 11 KvA
IOS: 120/208 vac, 20A, 3 Phase, 4 KvA
GPC: 120/208 vac, 30 A, 3 Phase, 4 KvA
GPCEXP: 120 vac, 30 A, 1 Phase, N/A
Disk Unit: 120 vac, 11 A, 1 Phase, .77 KvA
Printer: 120 vac, 5 A, 1 Phase, .34 KvA
Miscellaneous: .03 KVA

Applicable Publications:

TM 9-6920-892-10 Operator's Manual
TM 9-6920-892-23 Org/Direct Support Maintenance
TM 9-6920-892-23-100 Organizational/Direct Support.
Assembly Drawings and Parts List

Reference Publications:

None

Training Requirements Supported:

Information not available.

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